REPORT OF THE WORKING PARTY ON THE HOSPITAL PHARMACEUTICAL SERVICE

CHAPTER 1. INTRODUCTION

Terms of Reference

1.1 The Working Party was appointed in April 1968 by the then Minister of Health and the Secretary of State for Scotland "to advise on the efficient and economical organisation of the hospital pharmaceutical service with particular reference to:

(1) The most suitable unit(s) of organisation for the whole or parts of the service;
(2) The best use of pharmacists, including the need and facilities for their post-graduate training;
(3) The best use of supporting staff (including their recruitment and training);
(4) A suitable career structure for pharmacists and supporting staff."

1.2 We were asked to take as a starting point a definition of the functions of the hospital pharmaceutical service based on paragraph 6 of the First Linstead Report* (Appendix A).

Method

1.3 We, and our sub-committees, met twenty two times, visited ten hospital pharmaceutical departments (Appendix C), and commissioned O. & M. studies of the organisation and work of a sample of hospital departments (Appendix D). We invited evidence from interested parties, and obtained statistical information on the staffing of the service as at October 1968. We took note of previous reports (Appendix F) and relevant Hospital Memoranda.

Thanks

1.4 We would like to express our thanks to all those who assisted us in our task. Our visits and statistical questionnaires, and the O. & M. studies, made heavy calls on the time of hospital staff, and we appreciated the courteous and helpful way in which hospital authorities received us or our representatives. Many bodies and individuals from inside and outside the service sent evidence to us, and we are grateful for the care with which their submissions were compiled, and any of our subsequent enquiries dealt with. We would also like to mention our debt to the Central O. and M. unit of the Department of Health and Social Security, whose studies proved to be of great value in elucidating some of the difficulties facing the service.

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* Report of the Sub-Committee on the Hospital Pharmaceutical Service, H.M.S.O. 1955.

1.5 The expertise available to the Working Party was supplemented by that of Mr. J. A. Baker, Dr. S. M. McDougall, Miss E. A. Meikle, Mr. J. G. Roberts, Professor A. R. Rogers, Mr. D. F. Smith and Dr. V. F. Weinstein who joined the Working Party's Sub-Committees on Post-Graduate Training for Pharmacists and Supporting Staff. Their contributions and continuing interest in our work were very welcome.

CHAPTER 2. EVIDENCE

2.1 We received evidence in written and oral form (Appendix B). In the evidence there was general agreement that the hospital pharmaceutical service was unduly fragmented and did not achieve a full use of resources or offer a satisfactory career to pharmacists and other staff in terms of job satisfaction, status or financial reward. The proliferation of small independent pharmaceutical departments, and lack of adequate supporting staff, were seen to exacerbate the effects of a general staffing shortage which was severe in some areas. We were impressed by the unanimity of opinion that radical reorganisation was needed and by the apparent readiness of all concerned to make changes.

Functions of the Hospital Pharmaceutical Service

2.2 Those submitting evidence generally accepted the Linstead definition (1.2) of the functions of the hospital pharmaceutical service, but remarked upon the inadequate reference to research, and emphasised that the use of greater numbers of more potent, complex and expensive drugs presented both the doctor and nurse with problems requiring the specialist advice of the pharmacist, thus increasing the pharmacist's responsibility as a member of the clinical team, quite apart from the additional necessity of securing economies in the use of drugs.

Organisation

2.3 The evidence recognised that the organisation of pharmaceutical services would have to be flexible, taking account of the needs of rural or urban areas where different considerations may apply because of local geography or the type of patient to be served. It was agreed that whilst all hospitals needed access to pharmaceutical advice there was no reason why pharmaceutical services in some of the smaller hospitals should not be provided from larger centres.

Unit of organisation

2.4 It was accepted that larger units of organisation were needed but different suggestions were made about their precise form. Some submissions indicated that large Hospital Groups might themselves constitute viable pharmaceutical units, with smaller Groups combining to allow one Management Committee or Board of Management to provide services to the others on an agency basis, in some cases with bulk preparations being provided on a wider "area" basis. Other submissions envisaged that a comprehensive area service might be based on the District General Hospital, which would provide pharmaceutical services for itself and for dependent hospitals, including psychiatric hospitals which should be brought into the main stream of hospital pharmacy. The Association of Hospital Management Committees, some of whose members favoured an organisation similar to that proposed for the Hospital Supplies Organisation in England and Wales, thought a District General Hospital might provide advice and services to smaller hospitals, if necessary even where they were in different administrative Groups. When the evidence was submitted, the Report on the Functions of the District General Hospital* had not been published. It was not clear what size of area the advocates of a unit of organisation based on the District General Hospital had in mind, and some of their evidence suggested that functions such as bulk preparation, specialised quality control and purchase of supplies could be organised on a sub-regional basis. The need for an even larger unit of organisation was emphasised by the Pharmaceutical Society and its Scottish Department and Royal College of Physicians of Edinburgh, amongst others. They favoured an area organisation with a comprehensive pharmaceutical service being provided for 2,000 to 3,000 acute beds or the equivalent, or up to 5,000 beds of all types, or to a population of 300,000 to 500,000. Several Regional Boards also indicated that they had been considering a form of area organisation which in some cases would involve the creation of units serving some 4,000 to 6,000 beds.

Role of Regional Boards

2.5 Opinion was unanimous on the need for pharmaceutical services to be planned and co-ordinated by Regional Boards but the Association of Hospital Management Committees emphasised the responsibility of the Management Committees for the day to day running of hospitals, and the Teaching Hospital Association the special position of the teaching hospitals in England and Wales. There was general agreement also on the need for a Pharmaceutical Advisory Committee to give continuous advice to each Regional Board; in some cases this was envisaged as a Committee predominantly of pharmacists, with pharmacists as Chairman and Secretary, in others as a Committee on which medical and other disciplines would also be represented.

Regional Pharmacist

2.6 There was strong support for the appointment of a Regional Pharmacist either with advisory, or with advisory and executive, responsibilities. However, some of the evidence suggested that top grade pharmacists would best be occupied in a hospital department and that an effective regional advisory committee of pharmacists would be able to ensure that pharmaceutical activity was co-ordinated on a regional basis.

Role of Health Departments

2.7 The evidence drew attention to the advantages of action by the Health Departments in the dissemination of information, co-ordination of arrangements for training and purchase of pharmaceutical supplies, and some bodies envisaged a more formal position for the existing Hospital Pharmacists Consultative Committees.

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* The Functions of the District General Hospital (Central Health Services Council), H.M.S.O. 1969.

Retail pharmacists

2.8 Very few of those submitting evidence saw a place in the reorganised service for retail pharmacists, except in some rural areas where they might be able to give pharmaceutical advice, or in those cases where prescribing by EC10(HP) or RBP was the most economical way of providing for outpatient dispensing.

Staffing and Career Structure

Staff shortages and deficiencies

2.9 Almost all submissions drew attention to the high wastage and turnover in the Basic and Senior Pharmacist grades, to the unacceptably high number of part-time pharmaceutical staff, and to shortages in both pharmacist and technician classes, although some bodies argued that the present number of pharmacists in the service would be sufficient if manpower was properly used and deployed. Comments were made on the lack of a trained and stable cadre of technicians and other supporting staff, and in particular on the lack of a grade of senior technician to supervise other supporting staff or carry out specialised duties, and the need for a grade of in-service trained technical assistants without formal qualifications to carry out routine semi-technical duties.

Need to provide supporting staff

2.10 The evidence drew attention to the high proportion of time spent by many pharmacists on routine duties and the urgent need to provide the pharmacist with more technicians, clerks, storekeepers and ancillary staff who would carry out routine work under the pharmacist's direction, control or supervision. Several definitions were offered of the nature of "direction", "control" and "supervision". These are particularly important in the hospital pharmaceutical service because of the nature of the products handled and we deal with them more fully in Chapter 5. It was generally agreed that where a pharmaceutical process was not subject to quality control at a later stage or on completion, it should be carried out by a pharmacist or under his supervision—the amount of supervision being variable but sufficient to guarantee the end products. Two organisations representing technicians sought to extend the responsibility of the technician to allow him to handle Dangerous Drugs on his own account.

Career structure for pharmacists

2.11 In commenting on career structure, emphasis was placed upon the need for younger post-registration pharmacists in particular to be able to obtain experience in a variety of aspects of work, on better training, on a general improvement in remuneration, and on the establishment of a career structure in line with that of other graduate entrants to the Health Service. The evidence also called for recognition, in terms of status and salary, of the teaching, advisory and management responsibilities of pharmacists holding senior posts. Research and development were seen not only as proper functions of the pharmaceutical department but also as added interests and incentives to new entrants. Some proposals were made about possible grading structures for pharmacists but their nature depended upon the scale of organisation being proposed. Generally it was envisaged that there would be an entry grade for young registered pharmacists; a higher grade for pharmacists with 5 or so years of experience carrying out more responsible work who might be in charge either of a small hospital, or of sections in a hospital not having an area or extended manufacturing or supply responsibility; senior pharmacists in charge of a medium sized hospital or of major sections of work in a hospital with area responsibilities; and two top grades for pharmacists in charge of a large District General Hospital and of a large District General Hospital with extended area, or teaching, responsibilities.

Technicians

2.12 There was strong support for a qualified technician grade with a level of work for senior technicians and salaries appropriate to a qualified class. The advantages of using nationally accepted qualifications, that is the Dispensing Technicians Certificate of the City and Guilds of London Institute, the Certificate of the Society of Apothecaries, and the Certificate of the Scottish Association of National Certificates and Diplomas were recognised, and some suggestions were made as to the need for a higher qualification for technicians. The nature of this higher qualification was not clearly established and proposals included an examination with a large practical content, an advanced certificate similar to that for Dental Technicians, and a National Certificate from which it was suggested that technicians might, if they were sufficiently able, progress to training leading to study for a pharmacy degree.

Training

2.13 General approval was given in the evidence to the participation of pharmacists in courses in management, and the provision of courses on specialised subjects, especially pharmacology, and for opportunities for pharmacists to study for higher degrees. There was some difference of opinion on whether these opportunities should be provided only when the service had an established need for persons with such training. But national co-ordination of training (one submission suggested that a National Health Service Training Board should be established) was considered to be essential in view of the comparatively small number of staff concerned and the problems of arranging viable courses on a local basis. In the case of technicians it was suggested that hospitals should make use both of practical training in hospital departments and academic instruction in colleges of further education.

CHAPTER 3. NEW FACTORS AFFECTING THE WORK OF THE HOSPITAL PHARMACEUTICAL SERVICE

3.1 In considering the needs for the service of the future account must be taken of the changes that have occurred recently in hospital pharmacy.

More complex drugs, and decline in extemporaneous dispensing

3.2 There has been a rapid increase in the number of drugs marketed which are accepted to be therapeutically active. Manufacturers are also producing more drugs in unit dose and prepacked form which has led to a drop in extemporaneous dispensing. Even where extemporaneous dispensing is still justified much of it is often of a routine nature which can be carried out by technical staff working under the supervision of a pharmacist. But such dispensing may also involve the preparation of complex special formulations, including such items as dermatological and ophthalmic preparations and infusion fluids for individual patients.

Drugs in larger quantities and new forms

3.3 As the armoury of available drugs has increased in size and complexity so has the extent to which resort is made to rational drug therapy. In acute general hospitals the steady reduction of the average lengths of stay for patients has been associated with more intensive drug therapies during and after the period of hospital treatment. Similar developments have taken place in the treatment of psychiatric patients, and new techniques like haemodialysis have made increasing demands on pharmaceutical resources. Demands are also being made for drugs prepacked in small quantities to meet the needs of patients in day hospitals, to provide take-home drugs for patients discharged often at short notice from general hospitals, or for psychiatric patients going home for week-end or short-term leaves. The number of patients attending hospitals for treatment as in-patients or out-patients is also rising; it is significant that even allowing for changes in money values hospital expenditure on drugs has risen by nearly 45 per cent between 1963–4 and 1968–9 and the total annual expenditure on drugs by hospital authorities is now just under £26 million in England, Wales, and Scotland.

Scope for large scale methods

3.4 The reduction in the amount of extemporaneous dispensing has been associated with a corresponding development of prepacking and an increase in the production of bulk preparations. These developments have called for the use of more elaborate equipment and the employment of more supporting staff in hospital pharmaceutical departments. They have also led to greater activity in the field of routine process control and of specialised analytical control of pharmaceutical products used in hospitals. The organisation of these activities must take account of a wide range of factors such as the ease and cost of transport (especially for bulk fluids), the most economical use of equipment and specialised staff, the advantages of a department organised into clearly defined and viable specialist sections, and the cost of using alternative sources of supply.

Inadequate response

3.5 These changes are calling for new responses from the hospital pharmaceutical service, both in respect of the organisation and management of the service and the role of the pharmacist within it, although there has as yet been little attempt in many areas to consider these matters on anything other than an individual hospital basis.

Role of the hospital pharmacist

3.6 The pharmacist can no longer be regarded only as a dispenser of medicines. He has an important consultative and management role. He should be responsible for the planning of pharmaceutical services and the establishment and maintenance of safe systems of work within his department, and the collection of data on drug use. He has also to co-operate with medical and nursing staff in securing the most effective, safe and economical use of drugs. The Zuckerman Committee said in their recent report* that "there would seem to be a need in hospital for graduates (medical and non-medical) specialising in drugs and their effects in order to advise clinicians", and more recently the Royal College of Physicians has advocated in a report published in April 1969 that there should be a medical specialty of clinical pharmacology. The ultimate clinical responsibility for drugs administered to patients must rest with the clinician but some non-medical graduates, including pharmacists, have special expertise in clinical pharmacology and will have a contribution to make. The respective roles of the medical and non-medical specialist and the hospital pharmacist in this complex field will no doubt be the subject of a closer study by the professions. Nevertheless the increasing potency of drugs and the complexity of modern drug therapy requires that the pharmacist should function within the hospital as a technical expert able to use his scientific training to handle non-routine demands and provide advice within fields for which he is fitted by training and experience. The eventual scope of this advisory role cannot be precisely determined but there are areas where the pharmacist's advisory function to medical and nursing staff are generally accepted. These are:

(a) drug formulation, stability, incompatibilities and conditions of storage;
(b) dosage and methods of administration;
(c) qualitative and quantitative identification of drugs and pharmaceutical preparations;
(d) drug inter-actions, contra-indications, and side effects;
(e) drug costs and sources of supply;
(f) co-operation with clinicians in the provision of a drug information service.

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* Report of the Committee on Hospital Scientific and Technical Services, H.M.S.O. 1968.

Drug information

3.7 The number of new preparations and volume of explanatory material available in professional journals or from commercial sources about drugs is forbidding and there is a greater need than heretofore for comprehensive drug information to be made available to doctors, and for regular discussion between the prescriber and pharmacist about matters on which the pharmacist's knowledge qualifies him to give advice. Some hospitals have already developed drug information centres in which available material on drugs and drug use is collected and kept up to date.

Ward pharmacy systems

3.8 A recent report of a Joint Sub-Committee of the Standing Medical, Nursing and Pharmaceutical Advisory Committees of the Central Health Services Council has drawn attention to the evidence of a high incidence of error in the administration of drugs to in-patients and has suggested that in avoiding errors prescribers should have easier access to the pharmacist with his expertise and that the pharmacist should have an opportunity to co-operate with the clinician. The Joint Sub-Committee has also drawn attention to the need for ward stocks to be appropriate for the needs of the ward and subject to regular inspection by the pharmacist who should work closely with the nursing staff on the ward. In commending the development of ward pharmacy systems the Joint Sub-Committee have pointed out that regular ward visits enable the pharmacist to check the pharmaceutical aspects and advise on the pharmacological anomalies of prescriptions, to be available for consultations by doctors and nurses, and to examine and review the ward stock and stock lists. Where a system of ward visits is carried out stocking on wards is more rational and economical and the need for visits to the pharmacy by ward personnel with requests for prescriptions to be dispensed will diminish. At the same time the hospital pharmacist will achieve greater control over the timing and spread of the workload of his department, and the deployment of his staff.

3.9 We are aware that several schemes are being developed which seek to eliminate errors in the prescribing and administration of drugs and it is not yet clear which system will prove to be the most efficient and economical. But we consider that the development of ward pharmacy and of systems based upon the principles of ward pharmacy is to be commended and will be a major factor in the future development of the service. Whatever system or systems are eventually adopted the hospital pharmacist today has a continuing and heavy responsibility for ensuring with his medical and nursing colleagues that drugs are safely, effectively and economically used.

CHAPTER 4. ORGANISATION

PART 1: EXISTING POSITION

Organisation is generally on a hospital basis

4.1 In Chapter 3 we considered recent developments in hospital pharmacy and referred to the demands that these were making on the organisation of the service. It is our view that although some changes in organisation are taking place development is largely unco-ordinated and haphazard, and in the main the hospital pharmaceutical service has failed to break free from a tradition in which each hospital of any size supported its own independent pharmacy. There were for example 707 Chief Pharmacists in England, Wales and Scotland in August 1968, and the following extracts from a survey carried out by one Regional Board and submitted as evidence shed light on a situation we consider to be widespread: "This Group now consists of six general hospitals, two maternity hospitals, the children's hospital, and a post-surgery unit . . . With the exception of one general hospital all the other units are of 200 beds or less and six of them maintain independent pharmacies although they are no more than 4 miles distant from one another. The services of seven pharmacists, nine whole-time and a part-time technician in post, a comparatively large total of staff, maintain these units. This involves much duplication and inefficiency."; and again, "This compact Group now consists of five general hospitals (one large, four small), a fairly large geriatric hospital and a maternity hospital, serving a population of some 165,000 . . . All five general hospitals maintain independent pharmacies". Neither of these Groups had a Group Pharmacist.

Limited development of "Group" organisation

4.2 The Linstead Committees in England, and the Grosset Committee in Scotland recommended* that the organisation of hospital pharmaceutical ervices should be on a Group basis but less than half the service today is organised in this way. Our statistical questionnaire showed that only 126 pharmacists in England and Wales including teaching hospitals, and 5 in Scotland, received Group Pharmacist† allowances. The 1968 Hospitals Year Book showed just under a third of the Hospital Groups as having a Group Pharmacist, and a further 12 per cent as having a "Chief Pharmacist to the Group". One Metropolitan Regional Hospital Board stated in evidence that half the Groups in the Region had no Group Pharmacist, and this trend was reflected in the evidence of other Boards, in the findings of the Organisation and Methods Unit, and in the observations of the Working Party during their visits to hospitals. Even where Group appointments have been made they have not always carried with them the authority necessary to introduce improved and more economical methods. In their evidence the Manchester Regional Hospital Board said that "This Board has gone a long way towards implementing (Group Organisation) . . . Even so, where a group pharmacist has been appointed he is not always given the executive authority he needs to do his job. In many cases he acts only in an advisory capacity and he has no real authority over the pharmaceutical staff apart from those who work in the hospital in which he is chief pharmacist."

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* Advice was given to Hospital Authorities by the Health Departments in HM(55)22, HM(59)43, and SHM 41/1966.

† Because Chief Pharmacists in centralised Groups with only one department are not entitled to a Group allowance, these figures do not fully reflect the incidence of Group organisation.

4.3 Our evidence and observations confirmed that sharing of services by more than one hospital Group was rare, although two Groups—both in Scotland—out of the 16 Groups included in the O. & M. survey obtained pharmaceutical services on an agency basis and similar arrangements were seen during the Working Party's visit to Aberdeen.

Disadvantages of the existing organisation

4.4 The small scale upon which the work of pharmacists has been organised hitherto has led to duplication of effort, inflexibility in the deployment of resources, and lack of economy in manpower, materials and equipment. Because the different pharmaceutical activities are mainly organised on an independent hospital basis, neighbouring hospitals in the same or different groups are frequently duplicating services, or are buying from outside, when a nearby hospital could provide. Under present arrangements neighbouring hospitals are inhibited from helping each other because they are in different hospital authorities. But even when hospitals are under the same authority, confidence in shared arrangements is difficult to build up, because of the absence of overall direction and the risk that assistance given by any one hospital may be withdrawn if the supplying hospital itself comes under pressure.

4.5 There are further consequences of the small scale upon which the work of pharmacists is at present arranged. The number working in any group is in the great majority of cases too small to justify the division of any department into specialised sections. This in its turn works against the provision of technicians and other supporting staff adequately trained and economically used. It may tend towards the under-utilisation of expensive equipment which is likely to become a steadily increasing factor in the drug costs of the hospital service during future years. On its lowest level these defects are shown in pharmacists doing work that could well be carried out by technicians or even by unqualified assistants. A Departmental auditing team recently showed that in some psychiatric hospitals up to 50 per cent of the pharmacists' and technicians' time was consistently spent in counting tablets and filling containers by hand. Pharmacists are also known to be personally involved in routine work connected with the dilution and distribution of disinfectants, and in ordering and accounting for surgical instruments and sundries.

4.6 But the difficulties created by the present scale of organisation do not stop here. The small department is particularly vulnerable to staffing shortages and, as we show in the next paragraph, may well be a principal cause of them. In recent years staffing shortages have led to curtailment of schemes for improvement and in many areas pharmacists have been unable to carry out necessary inspections of ward drug stocks to their satisfaction: the importance of such work has been referred to in paragraphs 3.8 and 3.9. In some English Groups, services to out-patients have been maintained during staffing shortages only by the use of EC10(HP)s, and though the cost of dispensing by this means represents a comparatively small proportion of hospital expenditure on drugs (excluding hospital overheads, 7·4 per cent in 1967–8 and 6·9 per cent in 1968–9), much of the dislocation of services and in some cases extra expenditure involved could be avoided if the organisation permitted a more flexible deployment of manpower.

4.7 Moreover the scale of organisation has contributed markedly to the staff shortages referred to in the preceding paragraph. The present scale of organisation does not provide opportunities for the younger pharmacists to maintain their professional skills and to develop them by moving while still young between posts that widen their professional and practical experience. Without this experience they cannot adequately prepare themselves for the most responsible posts. As it happens the present organisation is such that there are not a sufficient number of posts carrying high level responsibilities to which younger pharmacists can aspire and which are necessary if the right relationship between pharmacists and the medical and nursing services are to be established and developed. The cumulative results are inadequate career prospects, faltering recruitment, high wastage among the younger pharmacists, and inadequate presentation of the views of pharmacists at the levels of management and policy formation where it is increasingly required.

Regional Pharmaceutical Advisory Committees

4.8 The first Linstead Committee and the Grosset Committee recommended regional pharmaceutical advisory committees with the result that at regional level all Regions in England, three Regions in Scotland, and the Welsh Hospital Board, have some form of pharmaceutical committee to advise the Board, or its officers, on pharmaceutical matters. In few cases does the membership in England and Wales conform with that recommended by the Departments in HM(55)22 and HM(59)43, and the status of the committees may vary from being an official Standing Advisory Committee to the Regional Board or to its officers, or a Standing Sub-Committee of the Board's Medical Advisory Committee, in one case with the S.A.M.O. as its secretary, to being an unofficial committee formed on the initiative of pharmacists. In at least one Region a Regional Pharmacists Committee meets in addition to the multi-disciplinary Regional Pharmaceutical Advisory Committee. The membership of the committees varies, about half having a multi-disciplinary membership and half being composed almost entirely of pharmacists. Some Regional Boards have become aware of the need to plan and manage services on a regional basis but we consider that the existing arrangements for ensuring that pharmaceutical advice is readily available to those who need it, and equally important is sought on any matters in which pharmaceutical interests may be concerned, fall short of those envisaged when advice was given on the formation of regional pharmaceutical advisory committees.

The pharmacist within the hospital management structure

4.9 The Working Party understands that there is uncertainty about the pharmacist's position in the management structure of the hospital and no clearly defined practice by which the Group, or Chief, Pharmacist has access to the chief officers of his authority, or to the Management Committee or Board. Sometimes he may report to the Chief Administrative Officer of the hospital, or of the Group, or of both if he is Chief Pharmacist in a hospital and Group Pharmacist: at others he may report directly or indirectly to the Medical Superintendent. Where uncertainty of this nature exists, it is difficult for the Chief Pharmacist to play an effective part on committees dealing with drug expenditure or other matters affecting the pharmaceutical services.

Physical facilities

4.10 This outmoded state of affairs is reflected in many parts of the service in the physical facilities provided for pharmaceutical departments. Although some of the newer hospitals have purpose-built accommodation, this has not always been planned in consultation with pharmacists. Many pharmacists work in limited accommodation or in conditions which restrict the manner in which their staff can be deployed, and suitable equipment be installed and economically used. The reports from Regional Boards and our own observations during the visits make it clear that in the years ahead informed consideration must be given to the re-siting or modification of existing accommodation. This cannot be done economically or efficiently on a piecemeal basis.

PART 11: RECOMMENDATIONS

Unit of Organisation

Terminology

4.11 In discussing future organisation to overcome the deficiencies outlined in the ten preceding paragraphs, the Working Party has adopted the terminology set out below. Though some of the words included may overlap with those which apply to current practices the terminology relates to the future service as we expect it to develop.

"Area Pharmaceutical Service"—the operational unit in which all basic pharmaceutical functions are normally carried out, providing pharmaceutical services for hospitals in an area specified by the Regional Hospital Board. The boundaries of the Area Pharmaceutical Service will almost always extend beyond those of even large Hospital Management Committees or Boards of Management.

"Area Pharmacist" —the pharmacist in charge of an Area Pharmaceutical Service.

"Section" —one of the constituent parts of an Area Pharmaceutical Service. There may be sections for in-patient services, out-patient services, sterile manufacturing, non-sterile manufacturing and prepacking, and quality control.

"Hospital Pharmacy" —the department in a hospital where pharmaceutical activities are carried out. The number and size of such departments within a Pharmaceutical Area would depend on the number, size and type of the hospitals within the Area, on the present layout of buildings, and on geographical considerations.

4.12 In considering the future organisation of the hospital pharmaceutical service a distinction may be drawn between those pharmaceutical procedures which bring the pharmacist into close contact with the patient and medical and nursing staff, and those which can be carried on away from the patient.

Patient services

4.13 Into the first category come in-patient and out-patient services, including dispensing, provision of pharmaceutical supplies to wards, departments and clinics, and advice to medical and nursing staff. The way in which these services are provided, and their location, must be related to the hospital situation and may in some cases be different from that of the bulk services referred to below. But whilst each hospital needs access to pharmaceutical advice we do not consider that every hospital requires a full-time pharmacist. In the case of smaller hospitals pharmaceutical supplies would be provided from a larger hospital whose own pharmaceutical staff would visit the dependent hospital as required. In Scotland, where medical tradition has favoured the referral of hospital out-patients to their general practitioners for prescribing, the problem of providing out-patient services will be minimal. In England and Wales there may well be cases where out-patient prescriptions can be provided more economically by EC10(HP)s than by a resident or visiting pharmacist. We do not wish to be dogmatic about the size of hospitals that should be regarded as dependent hospitals for the purposes of the pharmaceutical service, but where ward and departmental stocks are carefully drawn up and are kept under review it should be possible to serve the majority of small hospitals with under 200 beds and a small out-patient load, and possibly also a number of long stay (including psychiatric) beds, from a larger pharmaceutical centre. Telephone communications and suitably planned arrangements for conveying both supplies and pharmacists should satisfy routine and even emergency demands.

Services not directly associated with the patient

4.14 Into the second category fall the bulk preparation of sterile and non-sterile products, prepacking, and those aspects of quality control that in HM(65)22 were to be undertaken at regional or inter-regional levels. It is important that these activities are carried out on a sufficiently large scale to enable staff to specialise and acquire expertise in the processes concerned, and expensive equipment to be fully utilised: the larger the area covered the greater will be the scope for rationalisation, for example in prepacking. However, the scale of activity must not be so great that the pharmacists responsible for the activities are no longer aware of the clinician's needs and cannot respond quickly to local requirements, or that the cost of transport cancels out economies of larger scale production. The actual size of the most efficient and economical area for a particular service will vary according to local factors including the type and distribution of hospitals involved and the geography of the area, and must be decided in the light of local circumstances. We see no reason to disagree with those whose evidence suggested that over much of the country these services not directly associated with the patient could best be provided for areas comprising 4,000–6,000 beds.

4.15 The preparation of certain formulations currently regarded in particular hospitals as special preparations may in some instances be susceptible to production on a regional or sub-regional scale if insignificant variations in formulae can be eliminated. Steps must be taken to prevent unnecessary duplication in the preparation of such items where this is wasteful of manpower and production facilities. But most large district hospitals will need to have some facilities for the preparation of special formulations and these could in such cases be included in the services mentioned in paragraph 4.13.

Basic criteria to be satisfied

4.16 The hospital pharmaceutical service must be organised in such a way as to overcome the deficiencies mentioned in the first part of this chapter. The basic unit of organisation must therefore:

(a) provide an area of work large enough to ensure that pharmacists, technicians and other supporting staff can be fully used on the work appropriate to their training and skills, and that resources are not wasted by the duplication of services to which we referred in paragraphs 4.4 and 4.5;

(b) be of such a size that the scope and responsibility of the work justify the employment of a top class pharmicist and manager in the post of pharmacist in charge, enable staff to be deployed at levels appropriate to the length and quality of their experience, and make it possible for those pharmacists now working single handed or in isolated independent departments to become members of a pharmaceutical team;

(c) offer a wide range of pharmaceutical work, which provides diversity of experience to younger pharmacists to fit them for further responsibility, and at the same time allows for some specialisation by more senior staff;

(d) have sufficient flexibility in its staffing to enable the pharmacist in charge to move staff between pharmacies and sections to provide cover during staff leave, sickness or periods of particular strain, and to release them for the substantial measure of training that will be required in the future.

Type of organisation required

4.17 We consider that these criteria can only be completely satisfied by an Area organisation in which pharmaceutical services are provided, generally to more than one hospital authority, by an "Area Pharmaceutical Service" (See 4.11). The information in Table I convinces us that a single hospital Group will, with a few special exceptions, be too small to meet our requirements. The same objection applies even more to a service based on a single District General Hospital.

Minimum size of an Area Pharmaceutical Service

4.18 Local circumstances including limitations imposed by geography and communications will determine the optimum size of each Pharmaceutical Area. But we consider that no Area should be so small as not to provide adequate work for a team of *at least* eight pharmacists, and their supporting staff, used in accordance with the recommendations that we make in Chapter 5. In such circumstances the number of beds of all types in an Area might be as low as 2,500. The actual deployment of the team would depend on the nature of the services required, for example the number of separate hospital pharmacies or of out-patient attendances. A team of the minimum size might perhaps consist of one Area Pharmacist, five or six pharmacists mainly employed on patient services, and one, or possibly two, pharmacists employed primarily on special formulations and their process control, together with about 15 supporting staff engaged on work of a technical nature. Additional staff would be needed if bulk production was undertaken.

Advantages of organisation on a larger scale

4.19 Whilst we think that no Area should fall below the level of our minimum, (4.18), there must be many larger, and in some cases far larger Area Pharmaceutical Services. In larger Areas we believe that more work can be undertaken without a proportionate increase in qualified staff, because of the greater scope for the employment of supporting staff and for the flexible use of manpower. These developments should make for economy. The Area Pharmacist post would carry more responsibility and might be expected to attract a higher calibre of person at all levels, with consequent benefit to the efficiency of the service. The enhanced status of the Area Pharmacist would give him greater authority in his consideration of pharmaceutical matters with the heads of the clinical divisions and executive committees which may emerge from the "Cogwheel" proposals, and in his support of his colleagues at hospital level in their discussions with members of other disciplines. There might also be indirect benefits, particularly in transport. Data collected on rug use would be more meaningful, and new developments could be more apidly and uniformly applied over a wide area. We recognise that there are limiting factors on the size of any Pharmaceutical Area, but whilst allowances would have to be made for local conditions, we believe that a service covering an area of 4,000–6,000 beds of all types representing a cross section of all pharmaceutical work could meet the requirements we have set out, without lines of communication being so lengthy as to offset the benefits from the scale of organisation suggested.

TABLE 1

SIZE OF HOSPITAL GROUPS AS AT 31 DECEMBER 1968

Source: *Health Department Returns*

Region	*Population*	*Number of Hospital Authorities with the following totals of allocated beds*									*Total allocated beds*	*Number of groups*
		Under 500	501–1,000	1,001–1,500	1,501–2,000	2,001–2,500	2,501–3,000	3,001–3,500	3,501–4,000	4,001–5,000		
Newcastle	3,092,200	6(1)	18(5)	3(3)	4(2)	1					27,600	32
Leeds	3,216,500		4	6	8(2)	2(1)	1				32,500	21
Sheffield	4,620,800	6	6(2)	9(2)	5(2)	2	1(1)				33,400	29
East Anglian	1,713,800	2	3	4(3)	2	1(1)					13,600	12
N.W. Metropolitan	4,192,100	1	3	8(1)	6(2)	3(2)	1(1)				32,800	22
N.E. Metropolitan	3,397,200		3	6(1)	5(3)	4(1)		1			29,800	19
S.E. Metropolitan	3,536,000	1	5	12(2)	5(4)	1(1)					30,600	24
S.W. Metropolitan	3,255,000	2(2)	3	6(3)	8(5)	3(1)	3				39,300	25
Wessex	1,964,100		3(1)	4(2)	4(2)	1					17,200	12
Oxford	1,900,600	3	5(2)	3(1)	3						14,000	14
South Western	3,092,200	3	11(3)	8(4)	6(3)	1					32,000	29
Birmingham*	5,084,500	1	6(2)	6(6)	3	7	3				41,700	26
Manchester	4,551,600	2	6(1)	15(3)	4(1)	3(3)	1				40,100	31
Liverpool	2,256,400	1	4	3	3	2(1)	1	1			22,400	15
England: H.M.C.s	45,873,000	28(3)	80(16)	93(31)	66(26)	31(11)	11(2)	2			405,000	311
Wales: H.M.C.s	2,720,000	3	2(1)	4	3	2	3(1)				25,900	17
Boards of Governors	—	10	10(1)	10	6						31,900	36
Scotland: Bs. of M.	5,187,500	27(3)	18(2)	16(6)	4(2)	6(2)	2(1)				65,833	73

The number of wholly psychiatric Groups are shown in brackets.
* w.e.f. 1–4–1969 regrouping in Birmingham Region has reduced the number of Groups in that Region to 18 as follows:

1	—	4	7	1	1	2	1

Arrangement of services within Areas

4.20 Within each Pharmaceutical Area services might be provided according to different patterns, but Table II shows in very general terms the pattern we would expect to develop. This is not to be taken as a model to be slavishly followed, but as representative of our proposals; for example, while in-patient and advisory services must be provided at all major hospitals, there may be advantages in concentrating all bulk production activities on one site where practicable, or on a limited number of designated sites. Nor does our scheme depend on the location of sterile and non-sterile production on one site, and in any case for some time to come the siting of such activities will have to take account of existing facilities. Even in the final stages of reorganisation there could be many variations in the way activities are allocated: in one Area it might be possible to have an industrial centre as part of the department at the Area headquarters; in another, major blocks of the bulk production procedures might be undertaken on cheaper sites at a hospital away from the Area headquarters, or be divided between different hospitals. Finally, while reference is made in Table II to "acute beds", we do not think it possible to be specific about bed equivalents. Hospitals now tend to deal with every type of patient, and even if the different factors affecting work load were identified, e.g., in-patient or out-patient load, long stay or acute beds etc., different combinations of circumstances would produce different requirements in each Pharmaceutical Area.

Time needed for development

4.21 The planning of a pharmaceutical organisation on an Area basis can only be achieved after inquiry into the circumstances of each Area, its pharmaceutical needs and manufacturing capacity. Full implementation will require the provision of new facilities, and redeployment and retraining of personnel. But until an organisational framework has been created with an Area Pharmacist to manage the pharmaceutical services including staff, on an Area basis, development cannot begin. Thereafter procedures within hospitals may have to change and this will only be achieved with the co-operation of staff in other disciplines.

Possible Future Developments

Administrative structure

4.22 The Area organisation proposed is not intended to anticipate the outcome of the Green Paper proposals but is designed to produce a more effective pharmaceutical service within the present administrative structure. But we consider that the principles of our recommendations are essential for the hospital pharmaceutical service, and we believe that with suitable modifications they can and should be capable of being incorporated in any basic administrative structure.

Zuckerman Report

4.23 The Zuckerman Committee recommended that a Hospital Scientific Service should be set up within the existing National Health Service organisation, and should include the four main branches of pathology and the biological

OUTLINE STRUCTURE FOR HOSPITAL PHARMACUTICAL SERVICES

Unit	*Services to be provided*					*Staff*	*Notes*
	In-Patient	*Out-Patient*	*Sterile Production*	*Non-Sterile Production; Prepacking; Stores*	*Quality Control*		
1. Region					Analyses requiring advanced techniques and equipment for all hospitals in the Region (see notes).	Regional Pharmacist (who may in some cases also be an Area Pharmacist) (see notes).	Quality control for the Region would probably be carried out by a designated Area Pharmaceutical Service rather than by the Regional Pharmacist.
2. Area	For the central† hospital and its dependent hospitals	For the central† hospital and its dependent hospitals	Full range including non-routine and special items (but see notes)	Full range of non-sterile production, prepacking and stores	Own production process control. Assays and tests for the Area	Area team of pharmacists, pre-registration graduate students and technicians on the staff of the Area Pharmacist and subject to his general direction	It would be convenient for the Area functions to be carried out in one central department, but in the initial stages of re-organisation it is recognised that the functions might be split up between several hospitals in the Area. In some cases also one Area Service might carry out specialist work, e.g., manufacture of eye drops, for other Areas.
3. Hospital with at least 500 acute beds or equivalent*	For the hospital and its dependent hospitals	For the hospital and its dependent hospitals	Non-routine specialised intravenous fluids, and sometimes theatre water	Some bulk production, prepacking of non-standard products and stores	Own production process control	Staff allocated to the hospital from the Area team	These hospitals may also provide other services for nearby dependent hospitals. Some bulk production for the Area may be sited at one of the smaller hospitals.
4. Hospital with at least 200 acute beds or equivalent*	For the hospital and its dependent hospitals	For the hospital and its dependent hospitals		Stores	—	Staff allocated to the hospital from the Area team.	
5. Hospital with under 200 acute beds or equivalent*	All services to be provided by a pharmaceutical department in a larger hospital					Area staff, e.g., visiting pharmacists, as required	These are referred to as dependent hospitals

* Long stay beds would produce less pharmaceutical work; day and out-patient work would have to be taken into account.
† The central hospital is the hospital at which the Area Pharmacist and his headquarters are situated.

sciences, nuclear medicine, medical physics, biomedical engineering and applied physiology. In their report the Committee said "We think that pharmacists and pharmacy technicians might be appropriate for inclusion after discussion with the profession." Opinion on the inclusion of pharmacists and pharmacy technicians within a Hospital Scientific Service is not unanimous. The pharmacist is closely connected with the treatment of the patient, and he has professional responsibilities in this respect which would have to be safeguarded.

Supply

4.24 It may also be noted that in the field of supply the development of a Hospital Supplies Organisation in England and Wales on the lines outlined in HM(67)95 should be entirely beneficial to the hospital pharmaceutical service, even to the extent that in some cases the Pharmaceutical Areas and supply areas may share common boundaries. We understand that in Scotland central arrangements for the supply of drugs and dressings are made by the Scottish Home and Health Department.

The Role of the Regional Board

4.25 It follows from what we have said that the organisation of hospital pharmaceutical services must be planned by Regional Hospital Boards. They must:

(a) within the framework outlined within the preceding paragraphs, and in consultation with Hospital Management Committees or Boards of Management, and Boards of Governors, plan the Pharmaceutical Areas and advise initially on the location of the services of each Area to make the optimum use of existing buildings and pharmacy departments. We consider that the planning of services includes manpower planning and advising on the optimum use of pharmacists and technical staff;

(b) determine the boundaries of Areas and the executive arrangements (See 4.33ff);

(c) exercise general oversight of the administration and standards of the pharmaceutical practice in each Pharmaceutical Area: this might well involve continuing O. and M. studies;

(d) plan and consistently support the training of staff to ensure that a sufficient number of suitably qualified candidates will be made available for the posts likely to become vacant and that the expertise of pharmacists, technicians and other supporting staff in hospital pharmacies is kept up to date;

(e) ensure that information gained on all aspects of drug use and new developments in drugs is distributed throughout the region;

(f) establish and maintain effective working relationships with Boards of Governors (See 4.27);

(g) where appropriate directly administer certain services, e.g. certain types of analytical control.

4.26 Advice on pharmaceutical services must be made continuously available to Regional Boards. The Regional Pharmacist, whose appointment we discuss in paragraphs 4.29 to 4.32, will advise the Board on pharmaceutical matters in consultation with his professional colleagues and where necessary with the Area Pharmacists. But there must also be an advisory body in which medical, nursing, pharmaceutical, administrative and financial representatives are brought together to consider matters relating to the pharmaceutical services generally.

Board of Governors

4.27 The pharmaceutical services of the teaching hospitals in England and Wales will need to be planned in conjunction with the services of Regional Board hospitals. For example, in many fields it may be necessary for Boards to share training or other facilities, and as the scheme we propose develops staff deployment and procurement of supplies will require close liaison between Boards of Governors and Regional Boards. The ultimate responsibility for the planning of pharmaceutical services is a matter for the Regional Boards themselves, but Boards of Governors either individually or in association with each other or with Hospital Management Committees may provide a service for an Area. The liaison would be assisted if Board of Governors were associated with the Regional Board advisory machinery, and so were also consulted over the appointment of a Regional Pharmacist. The complex problems of the Metropolitan area with its concentration of teaching hospitals will have to be taken into account by the Regional Boards and Boards of Governors when they consider how the advantages of Pharmaceutical Area organisation can best be achieved in London. But we consider the general principles, with the degree of flexibility we have emphasised, are capable of application to the Metropolitan area.

Schemes for reorganisation to be prepared

4.28 We recommend that Regional Hospital Boards should forthwith prepare their schemes for reorganisation of services and that the schemes should in the case of Regional Boards set out:

(a) the organisation to be adopted at Board level for securing the planning and development of the pharmaceutical service, the constitution of any advisory committee with responsibilities for pharmaceutical services, and proposals for the creation of a post of a Regional Pharmacist;

(b) the responsibilities of each Area Pharmaceutical Service, the Group or Joint Committee responsible for providing the Area Service (4.34), and the name, type, bed complement and out-patient load, of each hospital or hospital authority to be included within the new Areas;

(c) any services to be provided on a Regional or inter-Area basis;

(d) the estimated numbers of pharmacists and technicians required in each Pharmaceutical Area;

(e) an estimate of the timing for introducing the Area organisation;

(f) the training to be provided;

(g) the proposals for the organisation of services affecting Boards of Governors.

Regional Pharmacist

4.29 The early appointment of a Regional Pharmacist is highly desirable. We have noted that some witnesses doubted whether the service could afford to have 15 to 20 of its most capable pharmacists withdrawn from the hospitals at the present time (2.6). But not all pharmacists so appointed would be lost to the practical application of their profession. Their contribution in a management role (4.30) would in itself be significant and in some regions Regional Pharmacists might have responsibility also for an Area Service. We consider that every Region should examine the case for the appointment of a Regional Pharmacist and we would expect that in most Regions there would be a sufficient volume of work to justify a full-time appointment.

4.30 The Regional Pharmacist would be adviser to the Board on pharmaceutical matters and his functions would include:

(a) membership of the advisory body on regional pharmaceutical services which, as already explained, must include doctors, nurses and administrators. We would normally expect the S.A.M.O. to be Chairman of this body;

(b) providing the Regional Board with such information as is necessary to enable it to exercise oversight over the administration and standards of pharmaceutical practices in the Pharmaceutical Areas and assisting the Board in this task;

(c) the organisation of training for all grades of staff in hospital pharmaceutical departments using, where appropriate, the regional training organisation. In view of the specialised nature of pharmaceutical work the Regional Pharmacist must keep in the closest liaison with the relevant educational and professional bodies;

(d) attendance at the Medical Advisory Committee and other relevant committees;

(e) membership of regional supply contracting committees;

(f) serving on the planning teams dealing with the layout and equipping of pharmacy buildings, new and old, throughout the region;

(g) serving on all appointment committees for Area Pharmacists;

(h) the collating of statistical and other information on drug use on a regular basis, and dissemination of this information to medical, nursing and administrative services throughout the region and to the Health Departments;

(j) where necessary administering any pharmaceutical services run directly by the Regional Board.

4.31 The Regional Pharmacist should have the right of access to the Board and its Chairman. He should receive the appropriate Board papers so that when a matter arises which is likely to affect pharmaceutical services, he is immediately aware of it, and will be able to offer his advice. His influence will depend to a great extent on his relationships with medical and nursing staff, and his position should also take account of the responsibility of the Senior Administrative Medical Officer for the provision of services to patients and of the Board Secretary for the co-ordination of services generally. We noted a suggestion that the Regional Pharmacist might be a member of the staff of the S.A.M.O. and we see no objection to this provided his right of access to the Board on pharmaceutical matters is preserved. In any event effective administrative assistance should be provided for him.

4.32 Regional Pharmacists would be expected to consult the Area Pharmacists on departmental matters, and at national level to meet with the Chief Pharmacists of the Health Departments.

Executive Structure for the Pharmaceutical Area

4.33 Whatever executive structure is adopted for the Area Pharmaceutical Service it must ensure that the Area Pharmacist is in a position to plan and run the pharmacy service on an Area basis.

4.34 We do not wish to lay down in precise detail the system of executive authority to be adopted below Regional Board level and consider that each Regional Hospital Board should discuss the system for any particular Area with the hospital authorities concerned. The results which we hope to obtain can be secured if one Hospital Management Committee provides pharmaceutical services for other participating authorities advised by a Joint Advisory Committee representative of each of them. Under these arrangements the Area Pharmacist would be responsible to the Hospital Management Committee, Board of Governors, or Board of Management providing the service for the other authorities, and this Committee or Board would take into account any advice given by the Joint Committee. The Area Pharmacist should have the right of access to the Board or Committee responsible for providing the Area service, and to its Chairman, and should receive the appropriate committee papers. He would have to work in close association with the Board or Committee Secretary, who as the principal administrative officer of the authority is responsible for the co-ordination of its services. In Scotland the position of the Medical Superintendent would have to be taken into account. The use of this type of system is assumed in the following three paragraphs.

4.35 We consider that staffing levels should be determined on an Area basis, and that the Area Pharmacist and his staff of pharmacists and technicians, irrespective of the hospital or administrative group in which they work, should be employed by the hospital authority responsible for providing the pharmaceutical services for the Area. Within the limits of the Area establishments, pharmacists in charge of hospital pharmaceutical departments would have delegated power to manage their own departments and fill established vacancies at the customary levels in accordance with the usual powers of delegation. Pharmacists and technicians would be designated under their conditions of service to be part of the Area team, working under the general direction of the Area Pharmacist. Clerical, storekeeping and ancillary staff would be provided by the constituent hospital authority concerned who would have the advice of the Joint Committee on the level of staff required.

4.36 We attach great importance to the right relationship of the pharmacist with doctors and nurses. Each authority in a Pharmaceutical Area should set up consultative procedures at appropriate levels to secure this. We would expect the Area Pharmacist to attend all the appropriate medical committees, but there may also be a need for a combined medical, nursing, pharmaceutical and administrative committee concerned specifically with matters affecting the pharmaceutical services at hospital level or in the Area as a whole.

4.37 We have noted the concern of the Association of Hospital Management Committees that the responsibilities of the Committees for the day to day management of their hospitals should be recognised. We consider that the proper interests of the participating authorities can be safeguarded within the organisation we have described, given the goodwill of the authorities concerned.

Economies

4.38 While the recommendations above are made with the primary object of ensuring the most effective use of the skilled services of pharmacists and technicians, and in ensuring close co-operation between them and medical and nursing staffs at all levels, we are also of the view that one of the results of introducing systematically the organisation which we recommend will be significant economies in the use of drugs and related supplies. We are aware of cases where the services have been organised on an area basis, and the status of the pharmacist has been recognised and his relations with the clinical teams improved. It seems that economies as well as improved services for patients, doctors and nursing staff have flowed from this organisation. We consider that the Joint Advisory Committees with the new consultative machinery we recommend in paragraph 4.36 should lead to improvements in keeping drug costs systematically under review. At every level the work of supervision will be improved if only because all concerned will be more fully informed and will also take their share in examining the large expenditure incurred on drugs and related products.

Studies of Organisation and Systems of Working

4.39 We consider that Regional Boards would benefit if O. and M. studies were carried out during the formative years of the service and were thereafter kept periodically up to date. Some mention has been made of this in paragraph 4.25. There would also be advantages if Boards kept the Health Departments informed of the results of any local studies which have led to the more efficient and economical organisation of the service at Area and hospital level.

CHAPTER 5. STAFFING AND CAREER STRUCTURE

PART 1: EXISTING STAFFING POSITION

Pharmacists

Staffing deficiencies

5.1 The service is at present grappling with an increased workload with a work force that has not been enabled to adjust itself to modern requirements. Between September 1960 and September 1968 the number of hospital pharmacists in terms of whole-time equivalents in Great Britain increased by 51 from 1,627 to 1,678, although evidence from our questionnaire (showing 1,523 whole-time equivalents in post in August 1968) suggests that the September figure was a high spot after a Summer period during which many part-time staff had been absent and many junior pharmacists were changing jobs. The evidence we received constantly referred to the continuous staffing shortages that have affected the service, and information supplied to the Health Departments by hospital authorities in 1961, 1964 and 1966, showed that overall vacancies for pharmacists have been estimated by hospital authorities at about 22 per cent in England and Wales and 14 per cent in Scotland. In the basic grades in 1966 vacancies in Scotland were 34 per cent, and in England and Wales 43 per cent rising to 72 per cent in the establishments of some Provincial Boards of Governors. Because there is no uniform standard of staffing provision these vacancies have been measured against establishment figures which may be based on such different factors as the funds allocated to a hospital pharmaceutical department in a given year, or staff in post in the previous year, rather than to a management study of need or a realistic assessment of the effects of redeployment of available staff.

5.2 We recognise that these staffing shortages are real in many areas. But the difficulties experienced by hospitals appear to us to be affected and aggravated by a number of important factors:

Insufficient use of supporting staff

(a) We are convinced that insufficient use is made of technicians and other supporting staff and that often the pharmacist's duties extend into fields of work that could without detriment to his professional responsibilities be undertaken by other staff. We have referred to this situation in paragraph 4.5. Sometimes these difficulties are accentuated by the dispersal of departments or the attitudes of pharmacists. One Regional Board reported that "This group, serving a catchment population of under 200,000, has three pharmacists and the whole-time equivalent of 3½ pharmacy technicians dispersed between four hospitals all within 2 miles of one another. This staff is not considered adequate but is made less so by its dispersion". We are also aware of instances where the pharmacist himself is reluctant to give up "bench work", and exercise a supervisory role.

Failure to attract and retain staff

(b) The service is failing to attract and retain younger pharmacists to carry out basic work. Of the whole-time permanent staff in Great Britain there are twice as many Chief and Deputy Chief Pharmacists as other grades and twice as many Senior Pharmacists as Basic Grade. The Basic Grade accounts for only 10 per cent of the total number of whole-time equivalents in Great Britain and nearly 18 per cent in Scotland, and numbers in the Senior and Basic Grades have been declining over the past years.* There has been a particularly large reduction in the number of male pharmacists, the proportion of male pharmacists being lowest in the lower grades. The number of female pharmacists employed whole-time in the Basic and Senior grades in August 1968 was approximately double that of the male pharmacists similarly employed.

Shortage of experienced staff

(c) There is also a shortage of experienced staff and at August 1968 just over a quarter of the whole-time pharmacists had been in post for less than five years, with turn-over in the lower grades being particularly rapid. During the seven months prior to 31 August 1968, 92 whole-time pharmacists joined the service of whom about 70 per cent were under age thirty, and about two thirds were women. During the same period 128 whole-time pharmacists left the service, 46 part-time staff joined and 50 left. Half the Basic Grade pharmacists (mostly aged 21–24) have less than one year's experience and 70 per cent under two years. One third of the Senior Pharmacists (mostly aged 25–29) have less than two years' experience. The time usually spent in the Basic Grade before promotion is only one to two years, and in the Senior Grade two to three years. This lack of continuity not only reduces the effectiveness of the pharmacists themselves but also is enormously wasteful of the time and patience of more senior staff who have to initiate newcomers, including the graduate students referred to below, into the procedures of the hospital and then see them leave just when they are beginning to make a real contribution.

Insufficient recruitment of pre-registration graduate students

(d) On present trends the situation is unlikely to be put right by recruitment of pre-registration graduate students. Between February and August 1968 the number of students in the service rose from 143 to 229 in England and Wales and 12 to 32 in Scotland. However, only 17 students (including 2 in Scotland) were appointed to the Basic Grade, and 5 to the Senior Grade, during this seven-month period, and indications are that graduate students are not being retained after registration in sufficient numbers to arrest the fall in the number of Basic Grade pharmacists.

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* Departmental enquiries in 1964, 1966, and 1968 showed that the number of whole-time sic and Senior pharmacists were respectively 232, 207 and 145, and 346, 311 and 300, the years concerned.

Part-time staff

(e) The serious effects of the staffing position in the lower grades have been partly concealed by the increased use of part-time staff or locums. Our questionnaire showed that 10 per cent of the staff time was accounted for by the employment of part-time or more often sessional workers, mostly women aged 30 to 49, and that there had been a steady increase in the use of part-time staff since February 1966. Many hospitals rely heavily on part-time pharmacists. Whilst we accept that the part-time pharmacist has, and must continue to play, an important part in the running of the service, the present degree of dependence on part-time staff leads to insurmountable difficulties during the holiday months when many part-time staff cease work.

Reliance on cadre of experienced pharmacists

(f) The service is now heavily dependent on the continued services of experienced pharmacists, now in their 50s. 40 per cent of the whole-time pharmacists in post in August 1968 were over 50, over a quarter being over 55. In the Chief grades nearly two-thirds were over 50.

Technicians

5.3 Pharmacy Technicians have been employed in the Hospital Service since its inception. They were a single grade class until 1966 when a graded structure was introduced which placed emphasis on the value of qualified staff. But although the number of technicians has increased in recent years this increase has not matched the demand for skilled technical staff called for by the developments to which we have referred in Chapter 3.

Shortage of qualified and experienced staff

5.4 Within the class there is a shortage of qualified and experienced staff. Our 1968 questionnaire showed that 61 per cent of the Technicians I and II in England and Wales held a formal qualification, although in Scotland the percentage was much less, 12 per cent. But the more experienced qualified staff may have to supervise others of their class who are Student Technicians (normally all in their first year of service) or less experienced technicians in grades I and II, of whom 27 per cent have under 2 years' experience in the Hospital Service. The position is made more difficult by the high turn-over in the class. This is to be expected in a class consisting mainly of women, but an unduly high proportion of technicians who obtain a qualification leave the service on qualifying. The extent to which the service is providing training to staff who pursue their career elsewhere is shown by the fact that although the Society of Apothecaries awarded 201 passes in 1967 and 239 in 1968, about three-quarters to candidates from the Hospital Service, of the technicians in post in August 1968 only 90 had obtained the Certificate or an equivalent qualification in 1967, and 99 in 1968.

Other Supporting Staff

5.5 The deficiences in the technician grades are made more serious by lack of other supporting staff. There were no available figures of numbers, but the evidence from written submissions and our visits showed that there were both shortages, especially of clerical and storekeeping staff, and no coherent staffing pattern. Because of shortages of staff, the uncertainties brought about by high turn-over and the different size of the units of organisation, the ratios of supporting staff to pharmacists, the type of staff employed, and the duties of the various categories, varied greatly. The service suffered from the lack of a recognised grade of ancillary pharmacy attendant, and this gap was variously filled by the unqualified Technicians II, nursing cadets, voluntary workers and a range of ancillary grades.

PART II: EXISTING CAREER STRUCTURE

Pharmacists

Unbalanced grading structure

5.6 We have referred in paragraph 5.2 to the inability of the service to attract young pharmacists. This is due to a number of factors; on one hand the existing system of organisation offers only limited opportunities to pharmacists for a full and varied career, but the grading structure itself (Appendix G) does not provide adequately for the present needs of the service. In practice, and in salary terms, pharmacists who are not in charge of hospital departments are effectively placed in a single group—that of Basic and Senior Pharmacists. It is clear that the concept of there being only exceptionally more than one Senior Pharmacist to each department has long been abandoned, and our staffing enquiries show that in a number of cases post-graduate students were promoted directly into the Senior grade on registration, and that most Basic grade pharmacists remain only one or two years in that grade before being promoted. Above this level no posts on promotion are generally available for officers who wish to remain in large departments where there is a range of varied and responsible work. The young pharmacist who cannot obtain a deputy appointment at one of the Grade IV and V hospitals has to make a choice between moving as a Chief Pharmacist to a small hospital where under the present organisation he is likely to be isolated and engaged in a narrow range of professional work, or waiting five to ten years before being able to compete for a Chief appointment at one of the larger hospitals. The evidence suggests that the structure in which the work of the Chief grades is at present organised offers no inducement to persuade younger pharmacists to stay in the Hospital Service and that many leave rather than wait for the opportunity of promotion to come. In turn the freedom of hospital authorities to deploy staff to the best advantage is limited by the absence of an effective and distinct grade between the Basic/Senior Pharmacist and the Chief.

Poor rewards at the top

5.7 Even for pharmacists who obtain appointments in the Chief grades the differentials in the basic remuneration of the three top categories of Chief are small. Only 54 pharmacists were in August 1968 receiving over £2,400, almost all of them being in teaching hospitals. Yet the fact that higher salaries are offered in the Chief grades has led to a proliferation of these posts. This in turn has helped to prolong the existence of the small independent department, adding further to the inflexibility of the grading structure and preventing the development of a more effective organisation.

Pay

5.8 Pay is a matter for the Whitley Council but we could not fail to be aware that the absence of a level of remuneration in the middle and upper ranges for pharmacists comparable with that paid in other scientific disciplines in the National Health Service is widely recognised as a major deterrent to recruitment.

5.9 It is not surprising that many hospital pharmacists, caught up in a fragmented and inflexible organisation, harassed by staffing shortages, and often justifiably concerned with their remuneration, have in many cases lost heart and are unduly diffident in representing their views to hospital authorities and colleagues in other professions. We believe that the present inadequacies in organisation, salary and career structure, and training, are the main cause of this situation.

Technicians

5.10 We believe that the absence of a higher grade for technicians who undertake the more responsible technical duties is an important factor in the inability of the Hospital Service to retain a large proportion of its qualified staff and is a cause of real concern (See 2.9). At present additional responsibilities are recognised only by a series of allowances ranging from £25 to £100. The nature of pharmacy work is such that pharmacy technicians have been unable to transfer easily into other hospital technical classes and so the Technician I ceiling reached after 13 years' service in the grade represents a career maximum. Two types of persons were recruited to this class in which women predominate: those often with some "O" level passes who wished to undertake training for the technician qualification, and those who had no intention of qualifying but wished to carry out the more routine work in the pharmacy. It appeared to us that the grouping of these two dissimilar types in the same class with a linked pay structure did disservice to both.

Other Supporting Staff

5.11 The terms and conditions of service of other staff employed in hospital pharmacies, clerks or storekeepers, porters, ancillary and domestic staff are those for other similar categories elsewhere in the hospital. Some evidence to the Working Party suggested that the placing of pharmacy porters and storekeepers within the overall grouping of their class should be reviewed to recognise the special responsibility carried by such staff for handling large quantities of drugs. But shortages of other supporting staff in pharmaceutical departments seemed to be due to lack of established posts rather than to difficulties in recruitment. Indeed, in a number of pharmacies we were aware that officers had been recruited in the clerical or ancillary grades to carry out duties that would normally be carried out by technicians.

5.12 We have already made proposals in Chapter 4 for reorganisation that will have far reaching effects on the use of staff. In the following paragraphs we deal with the new relationship of the various categories and give examples of the ways in which staff may be more effectively used.

Pharmacists

Appropriate duties

5.13 It is essential that the pharmacist should be employed on duties appropriate to his professional training, and for this reason he must be provided with adequate supporting staff to carry out other tasks. The pharmacist has an important advisory role (see Chapter 3) and pharmacists in more senior posts are also managers, responsible for planning an extensive range of services, for devising and instituting a safe system of work for their Area, section or activity, and for keeping the working of the systems they have devised under continuous and searching review. We would expect the pharmacist's bench work to consist primarily of non-routine and special procedures, and those aspects of quality control which require a pharmacist's skill and experience. The pharmacist should however also be encouraged to undertake research and development projects in his own field, including new formulations, and to co-operate with medical staff in the clinical trials of drugs.

Working system

5.14 The pharmacist in charge must ensure that all work carried out under his direction* or control* is subject to suitable tests and that every non-routine operation which is not subject to analytical control on completion is carried out under the supervision* or a pharmacist, but within these limits full use must be made of supporting staff. The allocation of duties to such staff will depend on the assessment made by the pharmacist of the aptitude, reliability and experience of the person concerned, and the degree of control or analytical testing incorporated into the system of work, but we are convinced that much more use than heretofore can and must be made of technicians and other supporting staff.

Deployment

5.15 Pharmacists should be deployed throughout each Area, and in each section, according to predetermined need. Where the work does not justify a full-time pharmacist arrangements should be such that the pharmacist attends only for appropriate periods.

Technicians

5.16 Pharmacy technicians should be employed wherever possible to carry out technical duties which do not require to be undertaken personally by a pharmacist. In large pharmacies, where the activities can be clearly differentiated and are routine and predictable, there will often be a place for a limited number of posts for senior technicians working as supervisors of other technicians, pharmacy attendants and ancillary staff, under the control or direction of the pharmacists in charge of a section or activity concerned with bulk production or prepacking. Having regard to the scale on which the organisation may be determined in the future there may also be a need for a senior technician able, under the supervision of a pharmacist, to carry out quality control work or specialised dispensing, and to assist other technicians in their dispensing work especially in a hospital where training of student technicians is carried out. We consider that still more effective use can be made of the technician grade if all technicians are required to possess an approved qualification, and the straight-forward and repetitive jobs, many of which are now undertaken by Pharmacy Technicians II, are delegated to a class of pharmacy attendant who would have no formal qualification but would be trained on the job (See 5.26).

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* See definitions in 5.20.

Clerical and Storekeeping Staff

5.17 Clerical and storekeeping staff should be appointed to carry out duties falling within their recognised spheres of work. The Area Pharmacists and if necessary the pharmacist in charge of a very large District Hospital, should be provided with adequate secretarial assistance. The needs of the hospital pharmacy in this respect should not be regarded as any less important than those of other departments of the hospital. Clerical and storekeeping staff, and ancillary workers, should normally work full-time in the pharmacy so that they may become familiar with its special terminology and procedures. Where this is impractical and the officer concerned also works in another part of the hospital, the periods he works in the pharmacy should be arranged on a regular basis so that the same officer is available at agreed times.

Ancillary Staff

5.18 The cleaning of the pharmacy and its equipment, and the carrying of pharmaceutical supplies to wards and departments or within the pharmacy, should be undertaken by the appropriate grades of ancillary staff.

5.19 Not all hospital pharmacies will require all the grades mentione and a small measure of overlapping of duties may be expected betwee different categories of staff, but the recognition of proper areas of work fc supporting staff should enable the duties of the different categories to be more clearly defined.

Examples of Use of Supporting Staff

5.20 The Working Party put forward the following examples of ways in which supporting staff could be used. In doing this they have also adopted the following definitions to emphasise the nature of the relationship between the pharmacist and his staff:

"DIRECTION" means that the person directing lays down the working system to be followed, decides who is responsible for carrying out each task, and ensures that the working system incorporates checks at appropriate stages.

"CONTROL" means that the person controlling confirms that the working procedures laid down are being properly followed through a personal inspection of reports and of details of checks being carried out during the working procedure.

"SUPERVISION" means that the person supervising personally oversees the undertaking of a task, i.e. so that he is aware of what is going on and can ensure that the task is carried out in the prescribed manner.

(a) *Acquisition and Storage of Drugs*

The pharmacist in charge must be responsible for ordering all drugs used in the hospital and for ensuring that they are controlled and stored in manners that satisfy the requirements of legislation and the Departments. He should not carry out the routine work. While the pharmacist would be expected to maintain his own contacts with manufacturers over the quality and quantity of drugs purchased, nevertheless the checking of invoices for drugs, and the receipt, checking and recording of goods should be carried out by clerical staff or storekeepers with appropriate training working under the direction or control of a pharmacist. All drugs when they are being returned to the hospital store should be checked by a pharmacist to assess their fitness for further use.

(b) *Acquisition and Storage of Other Pharmaceutical Products*

With regard to dressings, and if necessary medical gases, the pharmacist should be satisfied about the standards of quality, conditions of storage in the hospital and on wards, and sources of supply, but he need not be concerned with their issue in the hospital. We would expect him to be consulted about the level of use of dressings, and the working of any central sterile supply arrangements (See HM(67)13). We are aware that a strong body of pharmaceutical opinion considers that the pharmacist should authorise the orders for dressings and exercise a close control over their storage and use. If this happens it is essential that the pharmacist should have adequate supporting staff and that he should not be personally involved in the routine of preparing orders, or the receipt, checking and recording of goods. Surgical instruments, appliances, and non-pharmaceutical supplies should not be the responsibility of a pharmacist unless clear considerations of convenience and economy make this desirable, and adequate supporting staff are available.

(c) *Distribution*

The pharmacist in charge should lay down the working system for distribution of drugs and other pharmaceutical products. Issues of Dangerous Drugs should always be made by a pharmacist. For other drugs the issues to hospital wards or departments, and their documentation may be made by technicians, pharmacy attendants or storekeeping staff under a pharmacist's control or direction, depending upon the system of work used. Where the volume of work justifies it technicians or pharmacy attendants might work under the immediate supervision of a senior technician. Issues from the main pharmacy store to sections and to other hospitals should be made under similar arrangements.

(d) *Dispensing*

We would expect technicians to dispense prescriptions under the supervision of a pharmacist, the extent of any delegation of work being dependent on the pharmacist's system of working and his knowledge of the ability of the technician concerned. Supervision of dispensing would involve checks on the interpretation of the prescription, and checking any calculations and the quantity and identity of materials used, and the compounding of the preparation. We consider that whilst there would be considerable advantages if all prescriptions were read and interpreted by a pharmacist *before* any action is taken, this would not be practical as a universal procedure: provided that a suitable system of final checks and tests by the pharmacist is in operation the reading and interpretation of a prescription can be carried out by a technician.

(e) *Bulk Preparation*

The pharmacist in charge should lay down the system of work for the manufacture of all bulk preparations and be satisfied about their quality. The procedures could be carried out under the control of a pharmacist by pharmacy attendants (e.g. sterilizing, filling containers, sealing, labelling), or technicians (e.g. assembling, measuring, and in some cases mixing the ingredients), under the supervision of a senior technician or of a pharmacist, depending on the scale and nature of the operation and the degree of process or analytical control incorporated.

(f) *Quality Control*

Subject to arrangements made by the Regional and Area Pharmacists for analytical quality control, each pharmacist in charge of a section of work should be responsible for the quality of the products made. Technicians could carry out routine tests, record results which fall within predetermined limits set by the pharmacist, and inform the pharmacist of results not falling within the limits.

(g) *Checking of Ward or Departmental Stocks*

A pharmacist should satisfy himself on the method of storage, and the condition and age of drugs in store. Checking the contents of a store or drug cupboard against an approved inventory may be carried out by technicians.

PART IV: CAREER STRUCTURE—RECOMMENDATIONS

Pharmacists

5.21 The reorganisation of the service and re-deployment of manpower are essential pre-requisites to the development of an attractive career structure for pharmacists. The Area Pharmaceutical Services will offer posts of greater responsibility than those available under the existing organisations, and will also provide for a ladder of posts at different levels within the Area Service.

Grading structure—pharmacists

5.22 We envisage five main levels of responsibility (within the top two Grades, we would not preclude the possibility of there being salary ranges to take account of the differences in the size of the Regional Hospital Area, and Pharmaceutical Area):

Grade V	Regional Pharmacist	The Pharmacist responsible to the Regional Board for the functions given in 4.30.
Grade IV	Area Pharmacist	The Pharmacist responsible for the pharmaceutical services of an Area Pharmaceutical Service (See 4.11).
Grade III	Principal Pharmacist	A Pharmacist responsible to the Area Pharmacist for the pharmaceutical services of a large District General Hospital which is not the H.Q. of the Area Pharmaceutical Service, *and/or* Deputy to the Area Pharmacist in a large Area, *or* undertaking special responsibilities, possibly including those that extend beyond the boundaries of one Area.
Grade II	Senior Pharmacist	A Pharmacist responsible for the pharmaceutical services either of a medium-sized hospital or of a number of smaller hospitals, *or* of a major section of work of the Area Pharmaceutical Service or of a large hospital pharmacy *or* engaged in specialist work at a sufficiently high level.
Grade I	Pharmacist	A Pharmacist undertaking basic duties normally requiring some element of direction by a senior colleague.
	Pre-Registration Graduate Students	A post-graduate, pre-registration student undergoing training.

Teaching hospitals

5.23 We envisage that the structure above could with a minimum of adaptation be applied to teaching hospitals. We recognise for example that the level of responsibility of the chief pharmacist in the largest teaching hospitals would need special recognition. We recommend therefore that where a chief pharmacist post carries exceptional responsibilities, the Health Ministers, on the advice of a panel set up by the Pharmaceutical Whitley Council, should be able to place the post in Grade V.

Pay

5.24 Pay is a matter for the Whitley Council and we are not empowered to make specific recommendations on this. Assuming that suitable levels of pay are agreed for the new structure, we consider that the Hospital Service will offer many attractions to graduates wishing to pursue a career in pharmacy, and that the higher posts with their opportunities for wider and diverse experience and training to be created by the organisation we propose will provide substantial inducements for recruitment and a firm basis for a career structure which can hold its own with that for other graduates in the Hospital Service.

Technicians

Grading structure—Technicians

5.25 We consider that there should be the following grades of Pharmacy Technician in a reorganised service:

Senior Pharmacy Technician	A Technician who under professional direction is supervising the work of technicians and other supporting staff in a major section, *or* who is engaged on specialist work in a post approved by the Regional Pharmacist.
Pharmacy Technician	A Technician who has obtained an approved qualification.
Student Technician	A Technician who is studying to obtain an approved qualification.

Pharmacy Attendants

5.26 We understand that consideration is being given by the Ancillary Staffs Council to the recognition of a grade of "pharmacy attendant". We recommend that pharmacy attendants should be in-service trained staff for whom no prescribed qualification is required. This grade would not then form part of the grading structure for technicians but would carry out, under appropriate supervision or control, duties such as the cleaning, assembling, reassembling and dismantling of equipment, routine procedures connected with the bulk preparation of pharmaceutical products (e.g. filling, sealing, labelling and packing of containers), assisting with the receipt of pharmaceutical products and their issue to wards or departments, and comparable general duties.

Clerical, Storekeeping and Ancillary Staff

5.27 Staff in these grades would normally be expected to be part of the general pool of the hospital enjoying the terms of service, training opportunities and promotion prospects common to all their hospital colleagues. Their career opportunities in a hospital pharmacy might be limited and it is important that working for a period in a pharmacy should not result in a loss of opportunities for training with other similar grades, or limit their prospects of advancement. We consider that the staff employed to look after stores of drugs and other pharmaceutical products require special knowledge and a strong sense of responsibility.

Other Contributory Factors

Training and career structure

5.28 We wish to emphasise the importance to recruitment and satisfactory career opportunities of the constructive movement of pharmacists and senior technical staff within an Area and the organisation of a coherent system of training and of re-training. Hospital Authorities in particular should re-examine the contribution which could be made by a reallocation of duties and greater use of technicians within the organisation we propose. They should devise refresher courses for persons coming into the service including those who may be returning after a period of absence.

CHAPTER 6. TRAINING*

PART 1: EXISTING POSITION

Pharmacists

Qualifications of pharmacists

6.1 In recent years an increasing proportion of newly registered pharmacists have undertaken a degree course at a university or polytechnic and after December 1970 all pharmacists will qualify through a degree course. But at present there is still a predominance of pharmacists within the hospital pharmaceutical service who qualified through the Diploma, although over 45 per cent of pharmacists hold a qualification higher than M.P.S. and nearly a quarter of Chief Pharmacists are Fellows of the Pharmaceutical Society.

Post-registration training

6.2 Hospital Authorities, the Guild of Public Pharmacists and the Pharmaceutical Society have recognised the need for post-registration courses We think the present arrangements for these are somewhat haphazard an that more effective co-ordination of training would ensure that facilities ar made available to the pharmacist at the right level, time and place. There appears to be no recognised machinery whereby the hospital authorities and other bodies responsible for providing training are systematically informed of the needs and numbers of those requiring this. We understand that owing to staff shortage it is often difficult for staff to be released for training. This causes much wastage of effort in thinly attended courses and reduces the contribution of the pharmacists themselves in training their juniors.

Higher degree courses

6.3 The service has not yet been able to assess and make arrangements to meet the need for pharmacists to study for higher degrees. Our staffing enquiries revealed that there were only eight pharmacists in the service with an M.Sc. or M.Pharm. Seventeen pharmacists were shown as studying for a Master's degree. In three Hospital Regions supernumerary posts are being created to enable a limited number of pharmacists to study for a Master's degree, but this practice is not widespread and it is not yet part of an agreed planned policy.

Pre-registration post-graduate students

6.4 In the field of pre-registration post-graduate training, the hospital pharmaceutical service has played a growing part, so that in 1968 about one-third of the new graduates undergoing pre-registration training were gaining their practical experience under the supervision of hospital pharmacists with 116 hospital authorities.

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* We use the term training for the process of bringing staff up to a desired standard of efficiency by instruction and practice, recognising that the process may include systematic instruction at colleges of further education and similar institutions.

Technicians

Courses available

6.5 Following advice given by the 1958 Conference on Dispensing Assistants which was convened to consider the recommendations of the Linstead Committee in relation to Assistants in Dispensing, the Certificate of the Society of Apothecaries was accepted as a suitable qualification. More recently the Secretary of State for Scotland has accepted courses in conjunction with local technical colleges, sometimes leading to the Certificate of the Scottish Association of National Certificates and Diplomas, as the equivalent in Scotland, and in 1970 the first examinations are due to be held for the City and Guilds of London Institute Dispensing Technicians' Certificate Course 431.

Facilities

6.6 In some cases all training is carried out within a hospital, the instruction either being given according to a planned programme or being fitted in wherever time and circumstances allow. In others arrangements are made at local colleges of further education for attendance at evening classes, day or part-time day attendance, and occasionally block release, to supplement in-service instruction.

6.7 But in spite of the apparent multiplicity of courses the numbers of technicians available for training in a particular locality are few and facilities for training are unevenly distributed. Students near to a large town normally have access to colleges of further education but in more rural areas travelling is a serious problem and difficulties increase as training becomes more advanced: in August 1968, 302 out of 334 Student Technicians in England, Wales and Scotland were receiving some form of training, 197 by day release, but only 152 out of 322 Technicians II. The Technician II grade includes persons who are content not to acquire a formal qualification but there are some who are obliged by lack of facilities to remain unqualified. The position seems worse in Scotland where only 3 technicians in post in 1968 had obtained a formal qualification in 1967 or 1968, compared with 189 in England and Wales.

6.8 In these circumstances it is not surprising that several Regions have begun to consider training for pharmacy technicians planned on a regional basis, but regional co-ordination of training arrangements is generally lacking.

Other Staff

6.9 In all pharmacies instruction on the job is given to acquaint supporting staff with the special procedures and nomenclature relevant to the work of the pharmaceutical department. Because of the different number of staff concerned, and the irregular times at which new staff can be engaged, it is not possible within the limited organisational units to plan this training on a wider basis than the hospital itself.

PART II: RECOMMENDATIONS

The Health Departments

6.10 We recommend that the Health Departments, in consultation with the Department of Education and Science and Scottish Education Department, the Pharmaceutical Society, Schools of Pharmacy, the Guild of Public Pharmacists, the City and Guilds of London Institute, the Society of Apothecaries of London, and the Scottish Association for National Certificates and Diplomas, should ensure that the interests of the Hospital Service are taken into account when matters affecting the qualifications of pharmacists or technicians, or the development of academic courses, are being decided. We understand that regard would also be paid to the recommendations of any relevant Industrial Training Board. The Health Departments should also ensure that the needs of the hospital pharmaceutical service are kept under continuous review, and that a sufficient number of courses is arranged to cover these needs. To assist in this process Hospital Boards should inform the Departments of the courses arranged, and of difficulties experienced in mounting others.

General Considerations

Role of Regional Boards

6.11 Training must be organised by Regional Boards and their Training Organisations in consultation with Boards of Governors and the other authorities responsible for the day to day provision of pharmaceutical services. In planning training schemes Boards should ensure that the arrangements they make take account of their manpower needs, the responsibility and levels of work of the staff concerned, the home areas of the students in relation to the posts they may be expected to fill, and the cost and viability of courses. Numbers to be trained should be determined preferably over a term of years.

6.12 Boards should expect to be able to take advantage of courses sponsored or approved by the Pharmaceutical Society, or one of its local branches, by the Guild of Public Pharmacists, or by the examining bodies for technicians. Where the numbers to be trained are unlikely to be large, co-operation between regions in arranging courses should be encouraged. Regular discussions with the local bodies concerned with education and training in this field, should ensure that the scale of provision and the content of the courses are sufficiently relevant to service needs to justify full support from hospital authorities.

Local arrangements

6.13 Arrangements for training are essentially matters for local decision and must take account of local circumstances. Day, part-day, evening, weekend, block, or residential courses, supported where appropriate by correspondence, will commend themselves at different times and in different circumstances. Training within the hospitals will have a significant part to play and it must be carefully planned in relation to training given at colleges and other bodies.

Pharmacists

Pharmacists post-registration training

6.14 The rapid pace of development in pharmacy and drug therapy has created a need for courses of training for post-registration pharmacists to keep them abreast of modern developments and to inform them of new techniques. In the Area Pharmaceutical Services we propose, hospital pharmacists will in the future be able to receive experience of every branch of pharmaceutical work. But experience on the job even if supplemented by private reading of professional journals will be insufficient to enable pharmacists to absorb and retain information about new developments. Organised programmes are needed to assist the pharmacist to keep abreast of changes in his field. Particularly during the next ten years there will also be a need to supplement the basic education of pharmacists who qualified at a time when their professional requirements lacked some of the scientific depth and particularly the pharmacological content of today's courses. Only with such training will the pharmacist be able to discuss problems effectively with his medical and nursing colleagues, and share in the contribution that all three should make to patient care as a whole.

Training in specialist techniques

6.15 Limited but probably increasing numbers of pharmacists will have to be trained to undertake new types of specialist work. For example, we are aware that the recent development of nuclear medicine has led to the wider use of radio-pharmaceuticals, and we understand that there are likely to be opportunities in the Hospital Service for some thirty to forty pharmacists with specialist knowledge extending beyond that of their first degree course who are able to co-operate with doctors, physicists and biochemists in regional or sub-regional radioisotope centres. Quality control is also a sphere of work for which specialist training might be given. Where the pharmacist is responsible for laying down safe systems of work involving process checking or final analysis of products he will need to be kept up to date in quality control systems. But we do not see a need for all pharmacists to undergo comprehensive training in practical analytical control.

Training for higher responsibilities

6.16 The pharmacists in charge of Area Services and sections will be co-operating with senior members of their authorities in the planning and operation of a complex service. We consider that pharmacists must share fully in training for supervisory and managerial responsibilities.

Higher degree courses

6.17 We do not consider that possession of a higher qualification should be made a pre-requisite for filling senior posts. In a limited number of cases however, where the pharmacist is required to co-operate with clinicians and scientists in advanced research activities, or where he is able himself to play a major part in the elucidation of complex pharmaceutical problems, the nature of the work may call for a person who has had experience of the intensive training in methods of research provided by a Ph.D. course. There may also be growing needs for pharmacists with the M.Sc. qualification, whether obtained by research, by advanced study course, or by a combination of the two, provided that the M.Sc. course is closely orientated to the requirements of hospital pharmacy as we conceive them to be in the future. We do not feel that at the present time a precise forecast can be made of the number of pharmacists with an M.Sc. who might be required, nor do we feel that the service needs should be the sole criterion in providing opportunities for courses leading to this degree. In some cases the added interest and stimulus of a higher degree course might be a significant factor in maintaining an acceptable level of recruitment and efficiency. Some pharmacists will of course undertake research studies even though these are not officially sponsored.

Pre-Registration Graduate Students

6.18 Hospital pharmaceutical departments offer valuable training facilities for graduate pharmacy students in their pre-registration year. This is an important contribution by the Hospital Service to pharmaceutical activities throughout the country, and provides hospital authorities with a wide field of recruitment for new pharmacists. For these reasons it is essential that there should be the closest contact between hospital authorities offering training to pre-registration pharmacy graduates, the academic institutions who supply the students, and the Pharmaceutical Society, in order to ensure that the training provided in hospitals and colleges is complementary, provides a systematic introduction to hospital pharmaceutical practice and to the Hospital Service, and develops the student's professional knowledge and responsibility.

Technicians

Basic training

6.19 Pharmacy technicians should receive an all round basic training which fits them to develop the necessary skills in all aspects of technical work in a hospital pharmacy, both to encourage flexibility in the use of staff and to provide technicians with the widest range of interests and opportunities. We consider that there are considerable advantages in using national courses, and are satisfied that the City and Guilds of London Institute Course, and the Society of Apothecaries of London Examination for Pharmacy Technicians (1970 revised syllabus), provide an acceptable level of training. So does the Scottish Association of National Certificates and Diplomas Scheme for Pharmacy Technicians. This scheme demands 540 hours of study over its two years and is designed to produce a highly trained technician with a considerable knowledge of chemistry. We do not feel that all technicians will need to reach this standard, nor be in the service long enough to justify the type of course concerned, and we foresee difficulties in running courses of this nature on too wide a basis.

6.20 Where overall numbers to be trained are small, student technicians should take part in courses at colleges of further education attended by technicians employed outside the Hospital Service. They may also with advantage share part of their training with hospital staff from other disciplines. Whatever arrangements are adopted it is important that the student technician's basic training should be part of a programmed course which is conducted apart from his normal work, and this can generally best be achieved by theoretical and technical instruction at a college of further education supplemented by instruction in applied techniques in a designated Area. If all the instruction is to be given at a hospital centre, the arrangements should be approved by the Regional Board.

Advanced course

6.21 It has been suggested to us that an advanced course for technicians is needed. We consider that the basic qualification fits a technician to undertake most of the work necessary in a hospital and that technicians filling senior posts would qualify for these primarily on grounds of their experience, ability, and understanding of the procedures in which they are engaged. However, senior technicians with supervisory responsibilities would benefit from training in supervision, and from short courses dealing with aspects of sterile and non-sterile manufacture, prepacking, and distribution. As larger departments are formed a need might arise for a formal higher course to include instruction in manufacturing or distribution work in a pharmacy, some additional chemistry, and training in supervision. Such a course might be associated with a test of the technician's knowledge and practical ability, as is the case in certain Advanced Certificates of the City and Guilds of London Institute.

6.22 We are aware that in regional centres undertaking specialised analytical quality control there may be scope for the employment of technicians with a National Certificate in an appropriate science. Analytical quality control is a developing field and there is need to retain some flexibility in the staffing of these specialised departments, but this does not seem to justify the creation of National Certificate Courses for the generality of pharmacy technicians.

6.23 Quite apart from the training which the service ought to provide for its major grades, we are aware that there may be an exceptional individual who shows by his performance that he is capable of registering as a pharmacist. We recommend that these cases be treated on their merits and not in normal training programmes.

Pharmacy Attendants

6.24 Pharmacy Attendants must receive appropriate on-the-job instruction to fit them for the duties described in paragraph 5.26.

Clerical, Storekeeping and Ancillary Staff

6.25 The basic content of the work of clerical, storekeeping and ancillary staff in pharmaceutical departments does not differ from that of similar staff in other parts of the hospital and their training in basic work techniques should be that common to the class concerned. Provision should, however, be made for in-service courses in drug nomenclature, costing and record keeping, weights and measures, drug security, drug storage procedures and laboratory hygiene so that the staff is fully conversant with the pharmaceutical procedures, terminology and regulations appropriate to their responsibility and level of work. To the extent that the procedures of the pharmaceutical department are standard, such courses could be organised on a hospital, area or regional basis as numbers dictate: training to meet the non-standard procedures will have to be given on the job. The integration of training at the various locations must be closely co-ordinated. We note that in the ancillary field the Advisory Committee on Ancillary Staff Training has a responsibility for training.

Conclusion

6.26 The recommendations we have made aim to meet the present needs of the hospital pharmaceutical service. But if the service is to keep up to date there must be active and informed management at all levels. We hope that our proposals will provide staff able to satisfy this requirement.

SUMMARY OF PRINCIPAL RECOMMENDATIONS:

Organisation:

1 Hospital pharmaceutical services should be organised on a scale large enough to ensure that pharmacists are fully occupied on duties requiring their professional and managerial ability; to provide scope for the optimum use of technicians and other supporting staff; and to create the conditions needed for a satisfactory career structure (4.16).

2 The unit of organisation for pharmaceutical services should be the Area Pharmaceutical Service providing all the basic pharmaceutical services for an area which would almost always be larger than that of a single Hospital Management Committee, Board of Management, or Board of Governors (4.17). It should normally include some 4,000–6,000 beds of all types (4.19).

3 For reasons of geography and communication some smaller Pharmaceutical Areas may be required, but no Area should be so small as not to provide adequate work for a team of *at least* eight pharmacists, with their supporting staff. In these circumstances the number of beds of all types in such an Area might be as low as 2,500 (4.18).

4 The Regional Hospital Boards should undertake a survey of the pharmaceutical needs of hospitals in their regions and should draw up plans for the reorganisation of pharmaceutical services on an area basis. To be effective any survey must include teaching hospitals. Regional Boards should determine which of their hospitals should be served by each Area Pharmaceutical Service in the region, and agree with Boards of Governors on how teaching hospitals may provide, or be included in, Area Pharmaceutical Services (4.27–28).

5 The early appointment of a Regional Pharmacist is highly desirable to assist Regional Hospital Boards to undertake the responsibilities envisaged (4.29–30).

6 The executive structure adopted for each Area Pharmaceutical Service should be a matter for determination by the Regional Board in the light of local circumstances, but it should be such that the Area Pharmacist is in a position to plan and run all pharmaceutical services in the Area (4.33) and to arrange staffing (4.35) on an Area basis. A convenient arrangement would be for the Regional Hospital Board, after consultation with the hospital authorities in an Area, to designate one of those hospital authorities to provide pharmaceutical services on behalf of all hospital authorities in the Area (4.34).

Staffing:

7 The pharmacist should be fully employed on duties appropriate to his professional training. These are primarily the management of his Area, section, or activity, the laying down of safe systems of work, the proper exercise of his advisory role (5.13), some research (5.13) and the development of and participation in systems which enable the pharmacist to co-operate

with doctors, nurses and administrators in securing the safe, efficient and economical use of drugs (3.9).

8 The pharmacist should have adequate pharmacy technicians and other supporting staff to relieve him as far as possible of work which need not be undertaken by the pharmacist personally (5.14, 5.16–18, 5.20).

Career Structure:

9 An improved grading structure should be introduced for pharmacists (5.22), and technicians (5.25), which takes account of the organisation proposed and offers suitable levels of work. This should be supported where necessary by the constructive movement of staff, and the organisation of progressive systems of training (5.28).

Training:

10 The Health Departments should keep the training needs of the hospital pharmaceutical service under review in collaboration as necessary with the professional and educational bodies (6.10).

11 Training should be related to service needs and training schemes be planned and supervised by Regional Boards in consultation where necessary with appropriate educational bodies (6.11–12).

12 Training courses to keep pharmacists abreast of developments in their own field should be encouraged and developed. Courses to qualify pharmacists to undertake the managerial and supervisory duties authorised in the report should be provided as a matter of urgency where they are not already available (6.14–16).

13 In appropriate circumstances pharmacists should be encouraged and assisted to undertake higher degree courses (6.17).

14 A basic all round training for one of the nationally approved qualifications should be provided for Pharmacy Technicians to fit them to develop skills in the principal aspects of technical work (6.19). Training in supervision should be given to those technicians who are to carry these responsibilities. Some senior technicians may need in the future suitably planned advanced courses (6.21).

15 Other supporting staff should be given in-service instruction in procedures peculiar to pharmaceutical work (6.24–25).

APPENDICES TO THE REPORT

DEFINITION OF THE FUNCTIONS OF THE HOSPITAL PHARMACEUTICAL SERVICE

For the purpose of their enquiry the Working Party was asked to assume the scope of the hospital pharmaceutical service to be as follows:

(1) to be responsible for the provision, nature and quality of drugs, medicinal preparations, dressings, chemicals and pharmaceutical sundries;

(2) to ensure that during their storage in hospital, the potency and quality of all these items are maintained;

(3) to obtain the equipment necessary for the efficient and economical working of the pharmaceutical service;

(4) to make preparations to be used in dispensing prescriptions; to prepare other products for medical or surgical use; and to devise formulae to meet special needs;

(5) to dispense prescriptions;

(6) to investigate pharmaceutical problems arising in the use of medicaments;

(7) to assist in the development of new methods of treatment;

(8) to promote economy in the use of medical supplies;

(9) to assist in efficient prescribing by advising upon the nature and properties of medicaments and upon the selection of the most suitable substances and the form in which they should be prescribed;

(10) to instruct or advise on the instruction of those whose duties involve the handling of the material provided by the service;

(11) to provide all necessary facilities for pharmaceutical students to obtain comprehensive training in hospital pharmaceutical work.

LIST OF PERSONS AND BODIES WHO GAVE WRITTEN AND ORAL* EVIDENCE

Association of Hospital Management Committees*
Association of Pharmacy Technicians
Association of Scientific, Technical, and Managerial Staffs
Association of Scottish Hospital Boards of Management
Association of Teaching Hospital Pharmacists
Boots Pure Drug Co. Ltd.
British Medical Association
Guild of Public Pharmacists*
Guild of Public Pharmacists (Edinburgh and East of Scotland Branch)
Imperial Chemical Industries Limited, Pharmaceuticals Division
Institute of Hospital Administrators
Institute of Purchasing and Supply
Pharmaceutical Society of Great Britain*
Pharmaceutical Society of Great Britain (Executive of the Scottish Department)
Pharmaceutical Whitley Council Committee 'C'—Management Side and Staff Side*
Professional and Technical Whitley Council 'B', Committee 'C'—Staff Side*
Royal College of Physicians
Royal College of Physicians of Edinburgh
Socialist Medical Association
Teaching Hospitals Association
Worshipful Society of Apothecaries of London

Birmingham Regional Hospital Board
East Anglian Regional Hospital Board
Leeds Regional Hospital Board (Council of Pharmacists)
verpool Regional Hospital Board, Planning Committee
nchester Regional Hospital Board
wcastle Regional Hospital Board
rth East Metropolitan Regional Hospital Board (Report of a Working Party)
Oxford Regional Hospital Board
Sheffield Regional Hospital Board
South East Metropolitan Regional Hospital Board
South East Metropolitan Regional Hospital Board, Pharmacists Advisory Committee
South West Metropolitan Regional Hospital Pharmacists Committee
South Western Regional Hospital Board
United Leeds Hospitals
Wessex Regional Hospital Board
Western Regional Hospital Board, (Scotland), Pharmaceutical Advisory Committee

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APPENDIX C

HOSPITAL AUTHORITIES VISITED

Members of the Working Party visited the following Hospital Groups between 4 July and 10 October 1968:

Aberdeen General Hospitals Board of Management	The two Aberdeen Groups provide for 54 dispersed hospitals which serve a population of about 480,000
Aberdeen Special Hospitals Board of Management	
Burnley and District H.M.C.	Concentrated general Group in an industrial area
Kingston & Long Grove H.M.C.	Recently amalgamated psychiatric and general Groups in a London suburban area.
Knowle Hospital H.M.C.	Rural psychiatric Group
Mid-Herts Group H.M.C.	Group with acute and psychiatric services, including a new D.G.H.
Newport & East Monmouthshire H.M.C.	Industrial area with rural fringe
Nottingham No. 1 H.M.C.	Large city area with outlying districts
Torquay District H.M.C.	Widespread rural area
United Leeds Hospitals, Board of Governors	Provincial teaching hospital

During the visits, in addition to discussing the arrangement of pharmaceutical ervices and inspecting the facilities available to the pharmaceutical department, the Working Party took oral evidence from administrative, medical, nursing, and pharmaceutical staff of the hospital authorities concerned.

A visit was also paid to the Home Marketing Division of Boots Pure Drug Company Ltd. in May 1969, to see the manufacturing and packing departments.

STUDIES BY THE CENTRAL ORGANISATION AND METHODS UNIT

1 At the request of the Working Party the Central Organisation and Methods Unit of the Department of Health and Social Security carried out two studies of the work of hospital pharmaceutical departments in England, Wales and Scotland.

2 The first study consisted of an examination of the organisation of pharmaceutical services in a representative sample of hospital authorities. The hospital authorities concerned were:

Caernarvon and Anglesey H.M.C.

Cromer Area H.M.C.

Medway and Gravesend H.M.C.

North Tees-side H.M.C.

Robert Jones and Agnes Hunt Orthopaedic H.M.C.

Royal Eastern Counties H.M.C.

St. Bernard's H.M.C.

Verulam Group H.M.C.

West Cheshire H.M.C.

United Oxford Hospitals Board of Governors

Westminster Hospital Board of Governors

Ailsa Hospital Board of Management

Borders Hospitals Board of Management

Dingleton Hospital Board of Management

Royal Infirmary of Edinburgh and Associated Hospitals Board of Management

Southern Ayrshire Hospitals Board of Management

3 The second study was an analysis of the work being carried out by staff employed in representative pharmaceutical departments, and the O. and M. unit visited a Board of Governors, a Hospital Management Committee, and a Board of Management for this study.

4 The results of the two studies were reported to the Working Party during the first part of 1969. It is intended that the findings of the O. and M. unit will be published in due course as a Hospital O. and M. and Work Study Report.

STAFFING STATISTICS

APPENDIX E

OUTPUT FROM SCHOOLS OF PHARMACY

TABLE 1

Source: Pharmaceutical Society

It is estimated that there is a total "working population" in England, Wales and Scotland of about 25,000 registered pharmacists, and that 800 new registrations yearly are needed to keep the register at its present strength. Entrants to schools and numbers of new registrations as pharmacists in recent years have been as follows:

	Entrants		*Passes**		*Registrations 18 months after qualifying†*
1960	752	1963	592	1964	not available
1961	709	1964	647	1965	571
1962	743	1965	590	1966	521
1963	812	1966	706	1967	618
1964	906	1967	812	1968	718
1965	908	1968	814	1969	710 (to 30/12)
1966	798	1969	769		
1967	803				
1968	882				
1969	916				

* Mainly first entry passes, excluding referred passes.

† Excludes registrations under reciprocal agreements with overseas countries, and foreign registrations. It should be noted that some pharmacy graduates defer registration, e.g. until they have completed courses of post graduate study. A survey undertaken by the Pharmaceutical Society in 1969 showed that 88 per cent of graduates and 99 per cent of Diploma students who qualified in 1965 had applied for registration by November 1969.

STAFFING OF N.H.S. HOSPITALS (WHOLE TIME EQUIVALENTS) AT 30 SEPTEMBER.

Source: Health Department Annual Returns

TABLE 2

(a) Pharmacists and Pharmacy Technicians.

	1960	1961	1962	1963	1964	1965	1966	1967	1968
England and Wales									
Pharmacists	1,444	1,423	1,456	1,478	1,463	1,405	1,444	1,439	1,483
Technicians*	1,034	1,081	1,150	1,203	1,288	1,340	1,384	1,455	1,296†
Scotland									
Pharmacists	183	188	200	192	186	175	186	197	195
Technicians*	100	105	105	116	119	139	144	138	148

* Because of the introduction of the new grading structure in 1966, the figures up to and including those for 1965 may not be strictly comparable with those for 1966, 1967 and 1968.

† There were in addition 238 Student Technicians in 1968. For 1966 and 1967 Student Technicians are included in the figures quoted: separate details of the number of Student Technicians in these years are not available.

(b) Increases in Certain Categories of N.H.S. Hospital Staff in England and Wales between 1966 and 1968.*

Category of Staff	31 December 1960		30 September 1968	
	W.T.E.	Index	W.T.E.	Index
Pharmacists	1,444	100	1,483	103
Medical	16,584	100	21,232	128
Nursing and Midwifery †	206,304	100	271,640	132
Professional and Technical	22,828	100	31,693	139

* Statistics of hospital staff in Scotland are not exactly comparable with those in England and Wales, but the increases in Scotland are broadly similar.

† Numbers of staff; whole-time equivalents not available for 1960.

HOSPITAL PHARMACISTS AND PHARMACEUTICAL STUDENTS IN POST AT 31.8.68

Analysis by grade, sex, and nature of appointment showing number and whole-time equivalent.

Source: Working Party Questionnaire

TABLE 3

GRADE	All staff					Male					Female				
	Total		Whole time number	Part-time		Total		Whole time number	Part-time		Total		Whole time number	Part-time	
	Number	W.T.E.		Number	W.T.E.	Number	W.T.E.		Number	W.T.E.	Number	W.T.E.		Number	W.T.E.
England and Wales															
All permanent staff, excluding Students: Total	1542	1359·5	1218	324	141·5	729	696·5	670	59	26·5	813	663·0	548	265	115·0
Chief Pharmacist—Cat. V ...	159	159	159	—	—	145	145	145	—	—	14	14	14	—	—
IV ...	105	105	105	—	—	76	76	76	—	—	29	29	29	—	—
III ...	253	253	253	—	—	159	159	159	—	—	94	94	94	—	—
II ...	84	83·8	83	1	0·8	48	47·8	47	1	0·8	36	36	36	—	—
I ...	37	36·8	35	2	1·8	15	15	15	—	—	22	21·8	20	2	1·8
Deputy Chief Pharmacist—Cat. V	134	134	134	—	—	62	62	62	—	—	72	72	72	—	—
IV	67	67	67	—	—	33	33	33	—	—	34	34	34	—	—
Part-time pharmacist in sole charge	1	0·7	—	1	0·7	—	—	—	—	—	1	0·7	—	1	0·7
Senior Pharmacist	280	276·0	263	17	13·0	93	92·3	89	4	3·3	187	183·7	174	13	9·7
Pharmacist	135	130·4	118	17	12·4	48	47·1	44	4	3·1	87	83·3	74	13	9·3
Other Grade	1	1	1	—	—	—	—	—	—	—	1	1	1	—	—
Part-time sessional	286	112·8	—	286	112·8	50	19·3	—	50	19·3	236	93·5	—	236	93·5
Pharmaceutical Student	229	229	229	—	—	85	85	85	—	—	144	144	144	—	—
Locum covering absence of perm. staff	29	22·6	17	12	5·6	14	12·4	10	4	2·4	15	10·2	7	8	3·2
Locum covering vacant post (including 3 agency pharmacists).	62	45·6	33	29	12·6	27	23·2	19	8	4·2	35	22·4	14	21	8·4
Scotland															
All permanent staff, excluding students: Total	174	163·1	153	21	10·1	63	61·8	61	2	0·8	111	101·3	92	19	9·3
Chief Pharmacist—Cat. V ...	23	23	23	—	—	20	20	20	—	—	3	3	3	—	—
IV ...	10	10	10	—	—	7	7	7	—	—	3	3	3	—	—
III ...	22	22	22	—	—	7	7	7	—	—	15	15	15	—	—
II ...	12	12	12	—	—	7	7	7	—	—	5	5	5	—	—
I ...	2	2	2	—	—	—	—	—	—	—	2	2	2	—	—
Deputy Chief Pharmacist—Cat. V	16	16	16	—	—	7	7	7	—	—	9	9	9	—	—
IV	4	4	4	—	—	1	1	1	—	—	3	3	3	—	—
Senior Pharmacist	37	37	37	—	—	7	7	7	—	—	30	30	30	—	—
Pharmacist	27	27	27	—	—	5	5	5	—	—	22	22	22	—	—
Part-time sessional	21	10·1	—	21	10·1	2	0·8	—	2	0·8	19	9·3	—	19	9·3
Pharmaceutical Student	32	32	32	—	—	13	13	13	—	—	19	19	19	—	—
Locum covering absence of perm. staff	7	4·6	3	4	1·6	2	2	2	—	—	5	2·6	1	4	1·6
Locum covering vacant post ...	5	4·6	4	1	0·6	1	1	1	—	—	4	3·6	3	1	0·6

PHARMACY TECHNICIANS AND STUDENT TECHNICIANS IN POST AT 31.8.1968. *Analysis by grade, sex and nature of appointment showing number and whole-time equivalent.*

Source: Working Party Questionnaire

TABLE 4

ENGLAND AND WALES

Grade	All staff					Male					Female				
	Total		Whole Time number	Part-time		Total		Whole time number	Part-time		Total		Whole time number	Part-time	
	Number	W.T.E.		Number	W.T.E.	Number	W.T.E.		Number	W.T.E.	Number	W.T.E.		Number	W.T.E.
All permanent staff—total ...	1,613	1467·5	1,306	307	161·5	153	148·8	145	8	3·8	1,460	1318·7	1,161	229	157·7
Technician I	929	845·6	752	177	93·6	102	99·1	97	5	2·1	827	746·5	655	172	91·5
Technician II	380	322·6	261	119	61·6	36	34·7	33	3	1·7	344	287·9	228	116	59·9
Other Grade	1	0·4	—	1	0·4	—	—	—	—	—	1	0·4	—	1	0·4
Student Technician	303	298·9	293	10	5·9	15	15·0	15	—	—	288	283·9	278	10	5·9
Locum covering absence of perm. staff	17	14·7	11	6	3·7	3	3·0	3	—	—	14	11·7	8	6	3·7
Locum covering vacant post ...	16	9·9	5	11	4·9	4	3·5	3	1	0·5	12	6·4	2	10	4·4

SCOTLAND

Grade	All staff					Male					Female				
	Total		Whole Time number	Part-time		Total		Whole time number	Part-time		Total		Whole time number	Part-time	
	Number	W.T.E.		Number	W.T.E.	Number	W.T.E.		Number	W.T.E.	Number	W.T.E.		Number	W.T.E.
All permanent staff—total ...	151	147·2	141	10	6·2	21	21·0	21	—	—	130	126·2	20	10	6·2
Technician I	41	40·1	39	2	1·1	13	13·0	13	—	—	28	27·1	26	2	1·1
Technician II	67	64·9	61	6	3·9	3	3·0	3	—	—	64	61·9	58	6	3·9
Student Technician	43	42·2	41	2	1·2	5	5·0	5	—	—	38	37·2	36	2	1·2
Locum covering absence of perm. staff	12	12·0	12	—	—	5	5·0	5	—	—	7	7·0	7	—	—
Locum covering vacant post ...	3	3·0	3	—	—	—	—	—	—	—	3	3·0	3	—	—

APPENDIX F

REPORTS OF COMMITTEES AFFECTING THE HOSPITAL PHARMACEUTICAL SERVICES

First Linstead Report

Ministry of Health, 1955. Central Health Services Council. Standing Pharmaceutical Advisory Committee. *Report of the sub-committee on the hospital pharmaceutical service.* London, H.M.S.O. (Referred to in H.M.(55)22).

Aitken Report

Ministry of Health, 1955. Central Health Services Council. *Report of the joint sub-committee on the control of dangerous drugs and poisons in hospitals.* London, H.M.S.O. (Referred to in H.M.(58)17, and S.H.M.59/2).

Second Linstead Report

Ministry of Health, 1958. Central Health Services Council. Standing Pharmaceutical Advisory Committee. *Report of sub-committee appointed to consider organisation of hospital pharmaceutical departments.* (Not published but referred to in H.M.(59)43).

Messer Report

Ministry of Health, 1958. Central Health Services Council. *Final report of the committee on hospital supplies.* London H.M.S.O. (Referred to in H.M.(58)94).

Douglas Report

Department of Health for Scotland, 1959. *Report of the Scottish committee on prescribing costs.* Edinburgh H.M.S.O. (Referred to in S.H.M. 58/39 and S.H.M. 59/29).

Hinchliffe Report

Ministry of Health, 1959. *Final report of the committee on cost of prescribing.* London, H.M.S.O. (Referred to in H.M.(59)70).

Grosset Report

Scottish Home and Health Department, 1966. Scottish Health Services Council. *Report of a committee of the Standing Pharmaceutical Advisory Committee on the hospital pharmaceutical service in Scotland.* Edinburgh H.M.S.O. (Referred to in S.H.M. 41/1966).

Hospital O. and M. Service Report

Ministry of Health, 1966. Hospital O. and M. Service Reports 9. *The ordering and receipt of pharmaceutical supplies.* London, H.M.S.O. (Issued to Hospital Authorities with H.M.(66)33).

Hunt Report

Ministry of Health, 1966. *Report of the committee on hospital supplies organisation.* (Not published but referred to in H.M.(66)69 and H.M.(67) 95).

APPENDIX G

SUMMARY OF GRADING AND PAY OF PHARMACISTS AND SUPPORTING STAFF AT 1.1.70

Pharmacists:

1 *Grading and Salary Structure:*

(a) Chief Pharmacist:	Grade V	£1,668—2,327 (9 increments)	
	Grade IV	£1,541—2,128 (9)	
	Grade III	£1,448—1,977 (8)	
	Grade II	£1,383—1,751 (7):	and Deputy Chief in Cat. V hospital
	Grade I	£1,268—1,622 (7):	and Deputy Chief in Cat. IV hospital

A pharmacist responsible for the pharmaceutical services in a hospital or group of hospitals.

(b) Deputy Chief Pharmacist:

Appointments permitted only in Category IV or V hospitals

(c) Senior Pharmacist: £1,220—1,520 (6)

Appointments permitted "only in Category III, IV, or V hospitals, and only exceptionally would more than one post be so graded".

(d) Basic Grade Pharmacist: £1,152—1,448 (6)

(e) Post-Graduate Student: £ 875

2 *Allowances*

Chief Pharmacists with responsibilities for the pharmaceutical services of their Hospital Group may receive a group allowance of £65, £130, £195 or £260 depending on the size of the group.

Chief Pharmacists, and their Deputies, in teaching hospitals may receive teaching hospital allowances of £200, £295 and £395, and £60, £90 and £120, respectively.

3 Chief Pharmacist posts are graded in accordance with a pointage scheme which takes account of the number and type of beds, and out-patient attendances. A hospital with 900 general acute beds, and a proportionate number of out-patient attendances, would normally fall into Category V.

Pharmacy Technicians:

1 *Grading and Salary Structure:*

(a) Student Technician: £300 at 16—£355 at age 18—£600 at notional age 27.

A technician who is training to become a Pharmacy Technician.

(b) Pharmacy Technician II: £380 at 18—£550 at age 24—£765 by 6 increments.

A technician who has completed a course of introductory training or the equivalent.

(c) Pharmacy Technician I: £650—£910 (8 increments)—£950 after 5 further years.

A technician who possesses an approved qualification or has acceptable recognised experience.

2 *Allowances*

(i) Allowances of £50 and £75 are paid to Technicians I and II not under the direct supervision of a pharmacist who have responsibility for the custody of supplies and supervision of other technicians.

(ii) A Pharmacy Technician I with exceptional qualifications or experience who is carrying out special work demanding high skill and ability may be awarded an allowance of £35, £65, or £100.

Administrative and Clerical Staff:

Higher Clerical Officer	£977—£1,218 p.a.
Clerical Officer	£368—£1,019 p.a.
Personal Secretary	£787—£1,014 p.a.
Storekeeper Clerk	£793 (min Grade I)—£1,160 (max Grade IV) p.a.

Storekeeper clerks may be placed in one of four grades, the appropriate grade being determined by the beddage of the hospitals or groups, number of stores controlled, and whether the storekeeper clerks are single-handed or have control of other staff.

Ancillary Staff:

	Weekly Pay (Outside London)
Porter (Departmental Group C)	295/–
Storekeeper (500 or more beds)	318/–
Storekeeper (under 500 beds)	295/– or 306/–

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DEPARTMENT OF HEALTH AND SOCIAL SECURITY
SCOTTISH HOME AND HEALTH DEPARTMENT
WELSH OFFICE

Report of the Working Party on the Hospital Pharmaceutical Service

10 JU 1970
CAMBRIDGE

LONDON
HER MAJESTY'S STATIONERY OFFICE
1970

SBN 11320994 0

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TO: The Rt. Hon. Richard Crossman, O.B.E., M.P., Secretary of State for Social Services.

The Rt. Hon. William Ross, M.B.E., M.P., Secretary of State for Scotland.

The Rt. Hon. George Thomas, M.P., Secretary of State for Wales.

Secretaries of State,

We now submit our report on the hospital pharmaceutical service. The report reflects our conviction that this service as at present organised, staffed and accommodated is inadequate to meet the requirements of the Hospital Service as they are developing. Our recommendations aim to give the hospital pharmaceutical service a new structure, so that it can properly utilise its resources and obtain full benefit from the appeal which it should hold for pharmacists and their supporting staff.

Although we are not in a position to predict accurately the extent of future developments in the use of drugs, far-reaching changes can be expected. If future demands are to be satisfied there must therefore be active and informed management at all levels in the hospital pharmaceutical service, and close co-operation between the doctors, nurses, pharmacists and administrators concerned with drug-use in hospitals.

The preparation of our report, upon which we are unanimous, has taken a substantial period of time because of the range of enquiries which we have had to make or to initiate. We are aware that many hospital authorities, the pharmacists and their supporting staff are convinced that steps must be taken quickly to improve the present situation. With this view we agree. Nevertheless, we hope that any *interim* measures which may have to be taken as matters of urgency will be consistent with the future requirements of the service as we have outlined them.

It will be clear from what we have said in paragraphs 1.4 and 1.5 of our report by way of thanks to the many and different individuals and organisations who have contributed to our inquiries that we have been more than usually dependent upon the patient, scrupulous and clear-headed work that has been done for us by our Secretary, Mr. A. J. Merifield. We have made many and heavy demands upon his time and his organising abilities. We desire to record our sincere appreciation of all that he has done for us.

Noel Hall (*Chairman*)
N. Brierley
W. R. L. Brown
J. Crooks
J. S. S. Fairley
E. J. Fitchett
W. Macfarlane
A. Roxburgh
E. A. G. Spanswick
C. C. Stevens
D. M. Thomas

A. J. Merifield (*Secretary*)

February 1970